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November 4, 1968

RAILWAY AGE

THE TRANSPORTATION WEEKLY

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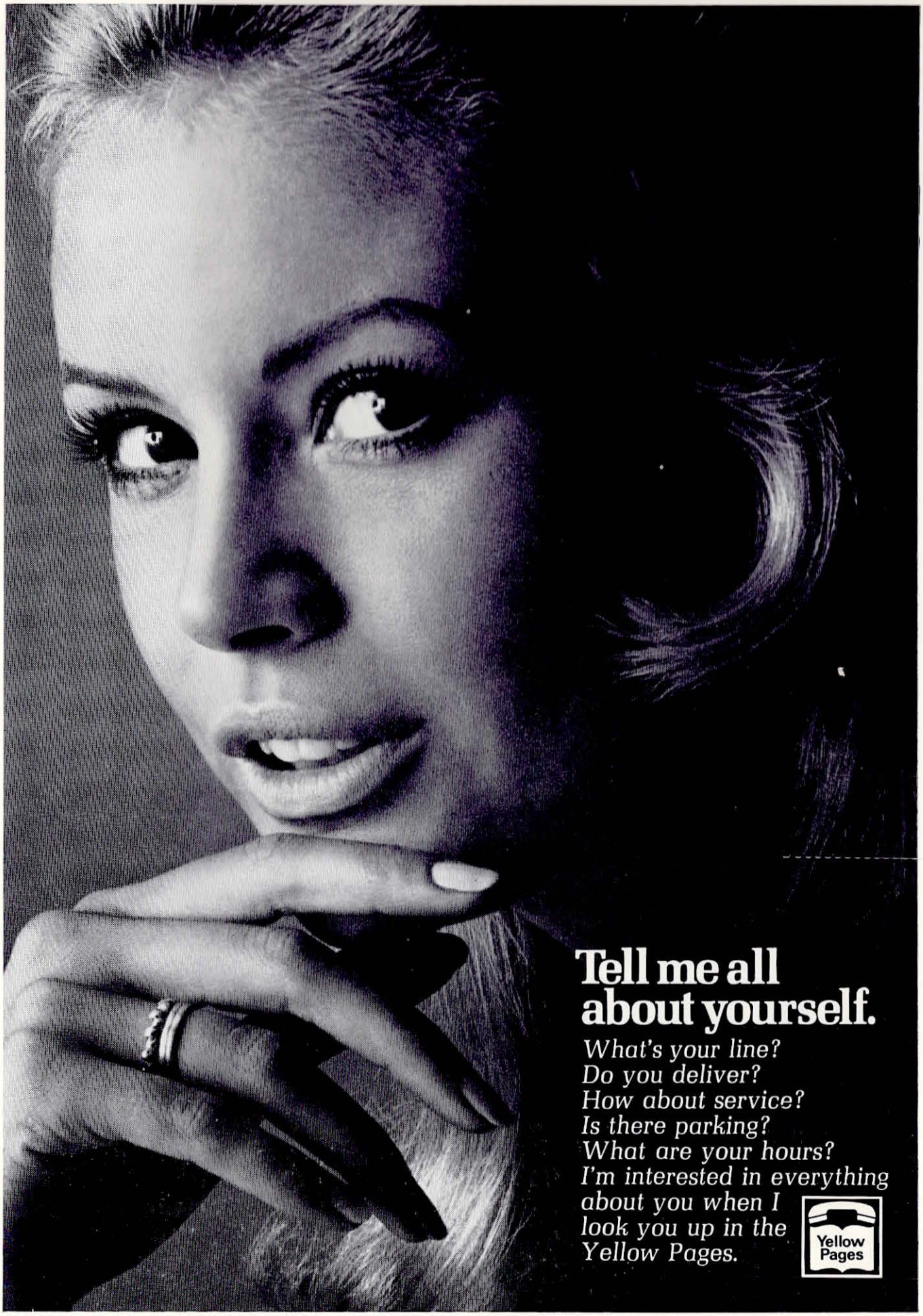
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Circle 4 on coupon page 22

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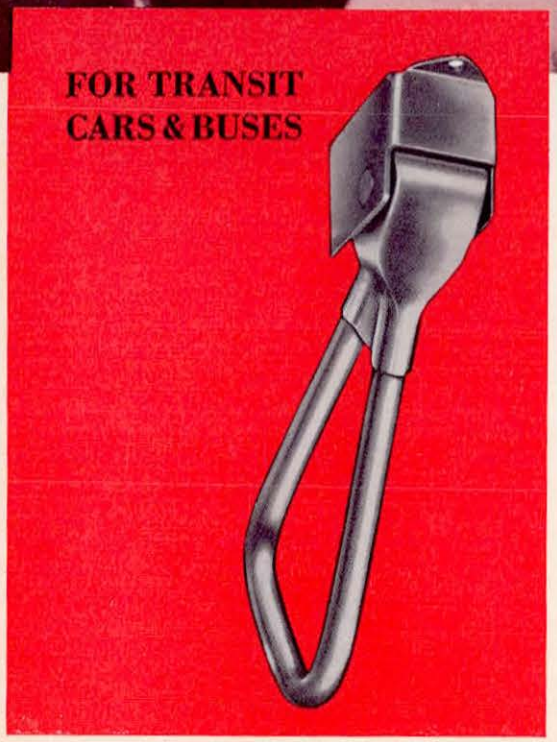

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Circle 5 on coupon page 22

RAILWAY AGE

Nov. 4, 1968 • Vol. 165, No. 18

THIS WEEK

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In spite of difficulties, big construction plans go ahead.

16 TurboTrains set to go
Revenue service between New York and Boston starts soon.

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The training device will be installed in a passenger car.

40 Viewpoint—Transit on the ballot
Billions are at stake in bond issues around the country.

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. . . AND COMING NEXT WEEK

Profitability is the goal—and sound maintenance-of-way management can be a potent force helping railroads to reach that goal. On one hand, substantial economies can be realized. On the other, service improvements which are possible with an upgraded plant can be significant revenue builders. In the Nov. 11 Railway Age, an eloquent advocate of this kind of M/W management, Southern's W. H. Moore, outlines the reasoning—and how it's being applied on Southern. Also: A report on the Muskingum Electric, a 15-mile Ohio industrial railroad that will serve as a test-tube for high-voltage, commercial-frequency electrification.

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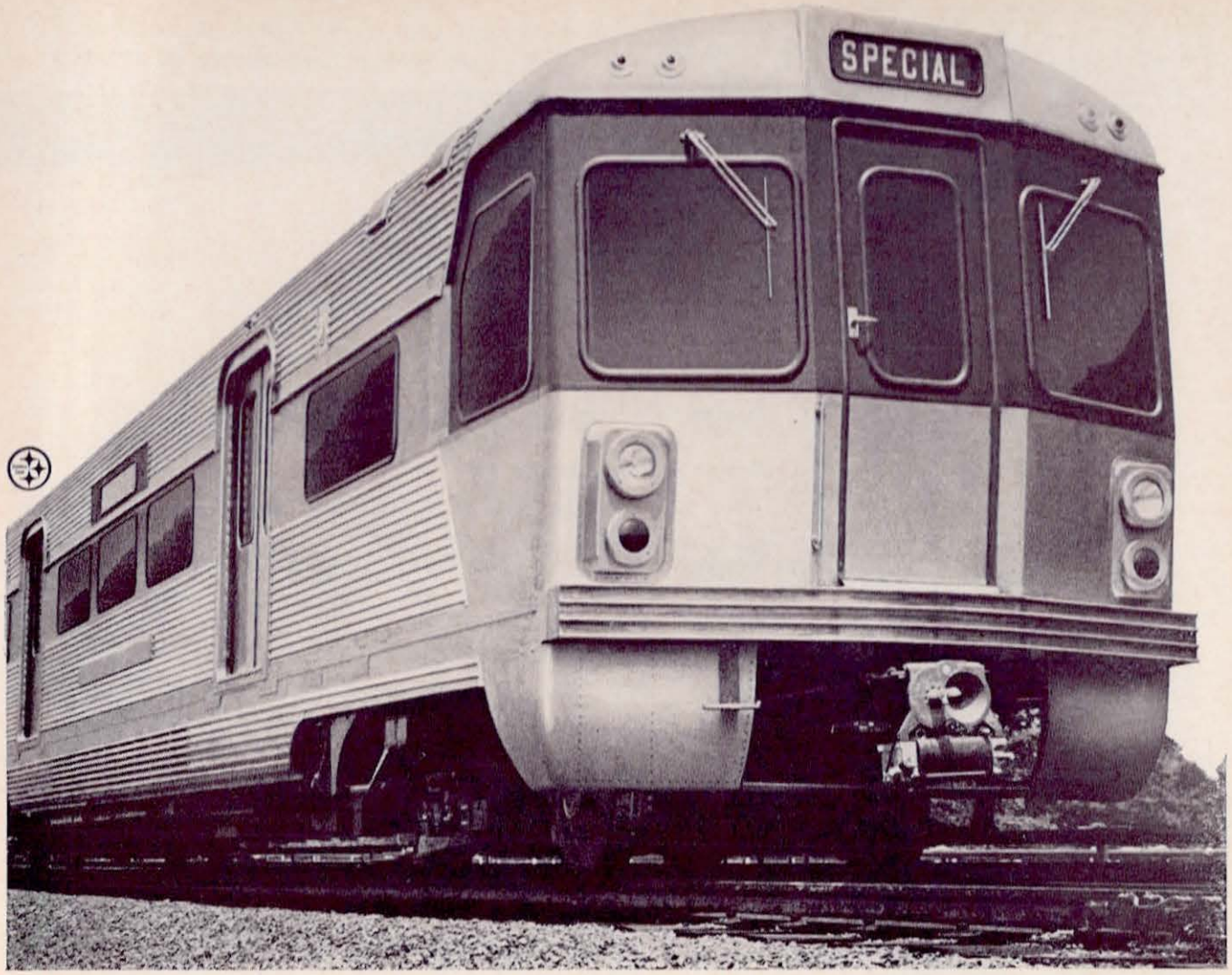

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INTERNATIONAL NICKEL

Circle 6 on coupon page 22

SHORT AND SIGNIFICANT

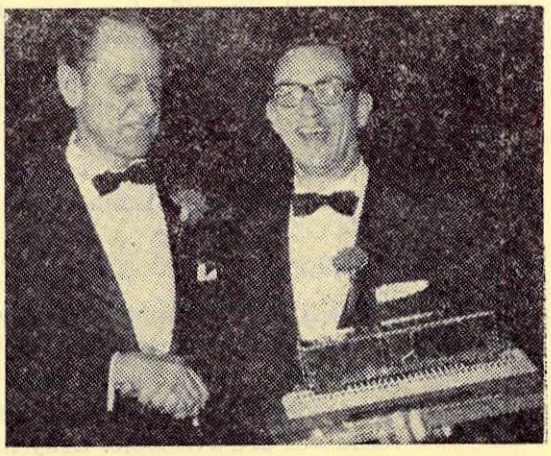
The state of the industry: It's good, but . . . The year 1968 is shaping up as a record-breaker, with all-time highs in the making in terms of freight ton-miles, freight revenues, and total operating revenues. But while earnings are "a little better than last year," expenses are also at record levels as a result of wage increases and rising costs. That was the gist of a state-of-the-industry report given at the annual member-road meeting of the AAR in Washington by President Thomas M. Goodfellow and Burton N. Behling, AAR vice president in charge of the Economics and Finance Department. Behling said railroad capital spending this year will total only around $1.3 billion (about $200 million less than the latest Department of Commerce estimate).

Truck tonnage dips below previous week Intercity truck tonnage in the week ended Oct. 19 was 0.7% below that of the previous week, though it was 3% above volume in the corresponding week of 1967, according to American Trucking Associations.

Penn Central makes a move in Chicago Rock Island's passenger trains are now the sole users of the terminal facilities at Chicago's LaSalle Street station. At a minute after midnight, Sunday, Oct. 27, Penn Central switched, moving former New York Central train operations from LaSalle Street to Union Station, home base for the Penn half of PC. Left unchanged in the consolidation were NYC Big Four passenger operations, which use Illinois Central's lakefront terminal. Even without PC, LaSalle Street remains a busy place, with about 80 RI arrivals and departures daily, mostly representing commuter operations.

DOT approves Chicago-area transport study A technical studies grant of $177,320 is coming to the Chicago Area transportation Study (CATS) from DOT for studies leading to a plan for coordination of mass transportation service in the southern part of the Chicago metropolitan area. DOT funds will cover two-thirds of the cost, with governmental agencies and transportation companies adding the remaining one-third. Five railroads will participate—Rock Island, Illinois Central, Norfolk & Western, Penn Central and Chicago South Shore & South Bend.

J. W. Henderson of Buckeye is new RPI chief The new chairman of the Railway Progress Institute is J. William Henderson, Jr., president of Buckeye International of Columbus, Ohio. Henderson succeeds W. Ashley Gray, Jr., president of General Steel Industries of St. Louis, as head of the supply industry's trade association. RPI's new vice chairman is Frank L. Bredimus, president of Symington Wayne Transportation Equipment Division, Dresser Industries, Inc., Chicago. New members of the executive committee are D. Y. Clem, president of McConway & Torley Corp., Pittsburgh, and R. Van Hassel, vice president and general manager, Magor Railway Division, Fruehauf Corp., Clifton, N.J. New members of the governing board are E. T. Ahnquist, vice president—marketing, Pullman-Standard, Chicago; J. A. Miller, vice president and general manager, Railway Division, Budd Co., Philadelphia; and C. Bruce Ward, president of Gunderson Bros.



GOLDEN FREIGHT CAR award for 1968 is presented to Illinois Central President W. B. Johnson by retiring RPI Chairman W. Ashley Gray, Jr. (left).

MONDAY MORNING REPORT

RPI DAY: A MIND-RUFFLER

You could walk from the well-programmed RPI Day with whatever goody fit your mood. There were forecasts of sun for the optimists, and warnings of hail for the un-optimists. There was reassurance of no new problems for those having trouble enough with the old ones. Finally, there were awards for four enterprising railroads. But RPI didn't plan that participants should depart with minds unruffled. You weren't supposed to leave wringing your hands, but you shouldn't have left waving and clapping them, either.

1969 LOOKS PROMISING

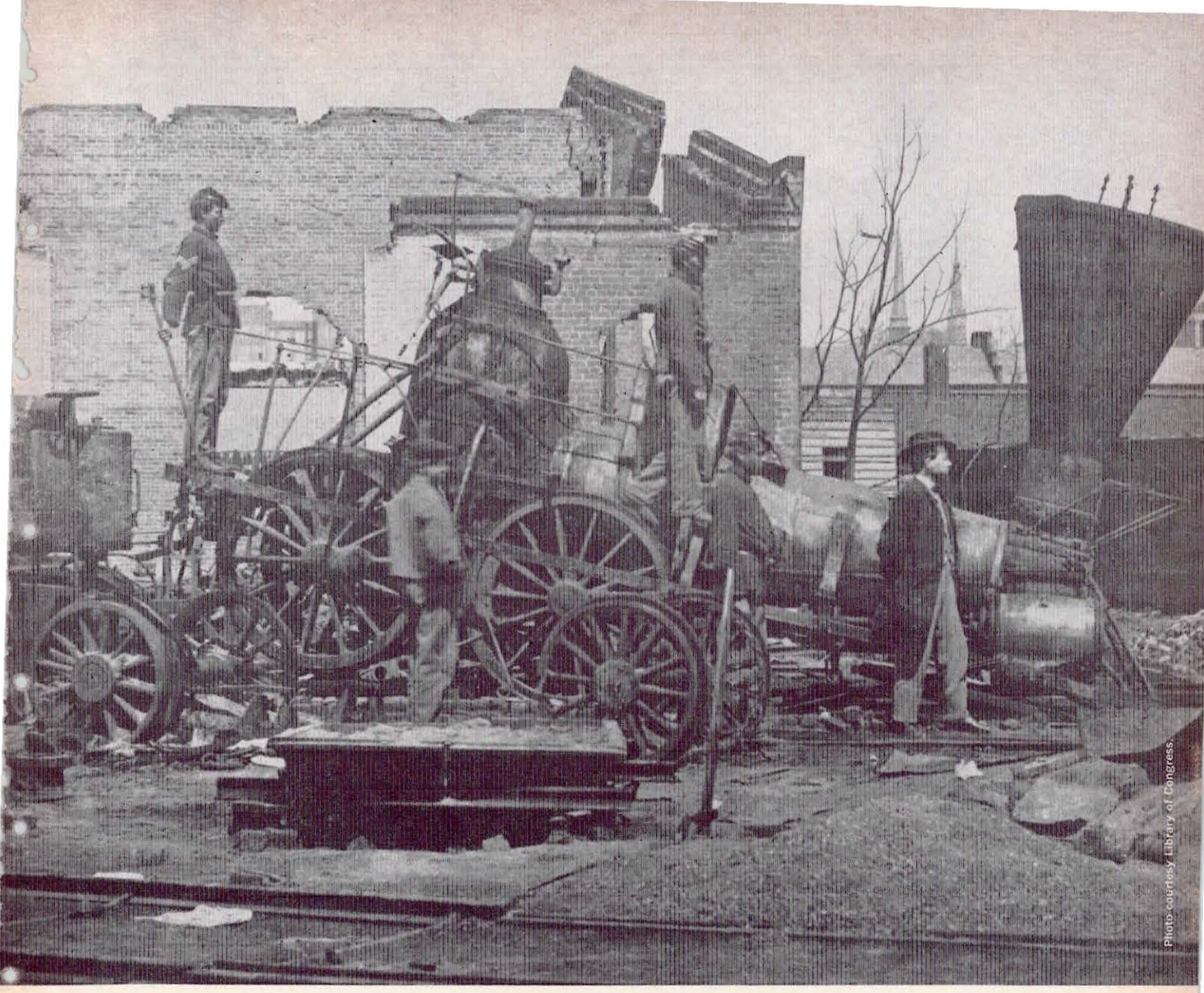
The forecasts for next year were good. W. Ashley Gray, Jr., General Steel Industries president and retiring RPI chairman, predicted a definite upturn in railroad buying. Frank E. Barnett, Union Pacific finance committee chairman, said his road already has placed $105 million worth of orders for next year. W. Graham Claytor, Southern president, said he has ordered $42 million of new equipment for 1969. Stuart T. Saunders, Penn Central chairman, assured a panel of newsmen that becoming a conglomerate in no way means his company is trying to dump the railroad business. Executives and analysts agreed that 1969 earnings would be better than 1968. And this year's could run as much as 30% better than 1960, one analyst said. Taking the long view, Barnett predicted a 20% transport-industry share of the predicted 1978 GNP of $1,410 billion.

HOW ABOUT 1978?

Notice Barnett said "transport share" in 1978. How much of that goes to railroads will depend on how much the problems are softened. The biggest mentioned was low rate of return, which, viewed another way, could be called the burden of unequal regulation. Another old problem brought up was government interference with mergers and with rail diversification into other transport modes. But there were hints that rails spent too much time complaining, using these problems as excuses. Illinois Central's W. B. Johnson cited the need for "a more statesmanlike attitude on the part of rail executives" for mergers and for rates, too. He called his own inspection of a Boeing 747 a "revealing experience" and a reason for careful thought lest the airlines be underestimated like the truckers were.

THINK, TALK POSITIVELY

Another major problem cited was cyclical buying. Ashley Gray called it a symptom of an underlying illness in rail economics, of unrealistic regulation, and of all the other problems. However, modern management tools, computerized information and controls and talent and resources are available. Gray had a parting word for the gloom merchant: "My challenge to the supply industry . . . and to the railroads is to think and talk positively."

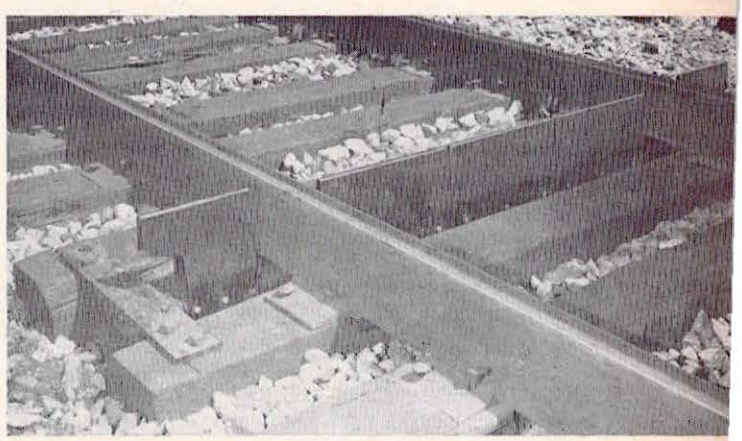


"Sure as heck wish we had installed one of them new Servo detectors that spot dragging equipment."

JUDGING from the look of things, it appears that these Civil War railroad men needed a lot more than a dragging equipment detector to avoid the mishap that befell them.

On today's high speed railroads and transit lines, dragging equipment can be a serious problem. To help solve the problem, Servo has developed the Model 8100, a rugged electro-mechanical system that detects and signals the presence of dragging equipment on rail-traveling vehicles. It can be actuated in either direction and automatically resets itself after being deflected by dragging equipment. Torque actuation range is from 200 to 800 inch-pounds, and can be readily adjusted in the field without hazard to personnel. The sensing and control mechanism is designed to eliminate "false alarms" caused by wind pressure. All internal components are housed in a sealed compartment for protection against dirt and moisture.

The Model 8100 won't eliminate dragging equipment from your rolling stock. But it can prevent unnecessary damage to cars and tracks caused by dragging equipment that goes *undetected*. For further information on the Model 8100, send for our Tech Data Publication 2018.



Model 8100 Dragging Equipment Detector is installed between two cross ties. It is not dependent on tie alignment and is unaffected by shifting of ties. Special alignment procedures are not required. Blade height is adjustable to fit rail sizes varying from 110 to 155 pounds. The steel detector blades can be replaced if damaged by unusually heavy dragging equipment.

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RAILWAY AGE
THE TRANSPORTATION WEEKLY
November 4, 1968

WEEK AT A GLANCE

Power-failure threat raised as strike continues

In Chicago, the Belt Railway strike continues. It's now in its fourth month. In Washington, meetings continued last week under the auspices of the National Mediation Board without visible results. And in Wisconsin, a new fear was raised — that of a power blackout directly related to the Belt strike and the inability of a major Milwaukee-area power plant to get enough coal to meet its needs. Coal has been moved via the Belt and Rail-to-Water Transfer and lake vessel, but this route has been shut off by the Brotherhood of Railroad Trainmen's strike. As a result, the stockpile of Wisconsin Electric Power's Oak Creek plant has dropped to a "perilously low point," and part of the power required for the area is now being purchased from other utilities interconnected in a Midwest grid system. The President of the Metropolitan Milwaukee Association of Commerce warns that "an equipment breakdown in the interconnected system could cause a serious and costly power interruption in the entire area at any time." And, the Milwaukee Journal, surveying officers of midwestern utilities, found a feeling of uneasiness. Some of these officials, the Journal said, believe the situation "had greatly increased the possiblities of a midwestern power blackout" similar to the one that hit Northeast and Middle Atlantic states and eastern Canada in 1965.

Voting to begin on unification of four ops

By early in December, the industry and its labor organizations should know if four operating brotherhoods will become one, as the United Transportation Union. Documents explaining the proposed unification have gone out to members of the Brotherhood of Railroad Trainmen, the Brotherhood of Locomotive Firemen & Enginemen, the Order of Railway Conductors & Brakemen, and the Switchmen's Union of North America. By now, all those eligible to vote — about 200,000 persons — should have received ballots. Return deadline is Dec. 5, and it's expected that the results will be available a short time after the cutoff.

Only a simple majority will be required for unification approval. But ground rules differ between unions — with, for example, certain retired members eligible to vote in one instance.

Long Island welcomes first of 620 new Budd cars

The Metropolitans (*above*) made their debut last week on the Long Island. That's the name the Metropolitan Transportation Authority gave to the new stainless steel air conditioned cars being delivered by Budd to the LIRR. They were the first four of 620 that will be turned over to the road between now and the fall of 1970.

To LIRR and MTA staffers, to James Miller, vice president and general manager of Budd's railway division, to design consultants Carl Sundberg and Louis Klauder, MTA Chairman William Ronan said, "Thank you for a job well done. In 14 months, you were able to transform a gleam in our eye into a gleaming eyeful."

GUS WELTY

LINES ON LABOR

RAILROAD EMPLOYEES, like millions of other Americans, go to the polls Nov. 5 for the quadrennial exercise in democracy which makes a President. And election-eve seems as good a time as any to reflect on the declining political power of rail labor and its organizations.

POLITICS IS A GAME of numbers. It's the adding-up of minorities to make a majority. So where does rail labor fit? In absolute terms and in relative terms, it shows up as a shrinking minority, and a splintered one at that.

THE FIGURES tell the story. In 1932, at the start of the Roosevelt era, 38 million votes were cast. Railroad employment totaled more than a million. In 1952, at the start of the Eisenhower years, 61 million votes were cast. Railroad employment stood at 1.2 million. Four years ago, the vote topped 70 million, and it may go higher in '68. But railroad employment this year is just about half what it was 16 years ago, and it's even down substantially from 1964 levels. The railroad man was once a force to be reckoned with. But now?

TWICE DURING THE '60s, the Congress—controlled each time by Democrats—has imposed arbitration upon rail labor. There is a strong suspicion that Washington's patience is wearing perilously thin in the crew-consist dispute, in which one key road has been struck for three months and two others have a knife at their backs. If the pollsters have been right, labor can look ahead to a more conservative-oriented Congress next January. That could mean real trouble, for organizations that choose to act as if they still had the clout of the FDR days.

MEANTIME, HOW WILL rail labor vote? Union publications have followed a certain predictable pattern: Up with Humphrey, down with Nixon, and who's Wallace? But the rank-and-file may have different ideas. There is a slice of conservatism in rail labor itself. There is also a slice of WASPishness. If you take the two together, the conclusion is inevitable: Candidates Nixon and Wallace are going to pull votes—more votes than union leadership would like to admit, more votes perhaps than union leadership has any inkling about.

RAIL LABOR, and especially its leadership, may be facing tough choices after the election. New thinking may be required. Then again, in the context of a labor organization or any other kind of organization, what's so bad about that?

Command center planned by New York Transit

Handling some 10 billion passenger miles annually is quite a job for any railroad, but it's just the normal annual chore of New York City Transit Authority. Millions of passengers ride NYCTA's 720 miles of mainline trackage, arriving and departing from 482 stations. To carry this load, New York's transit system runs 8700 trains daily.

• **Control of the system.** Work is now under way for developing a rapid transit command center, which, says Charles E. Kalkhof, NYCTA superintendent, maintenance of way, "is to help make our system operate at optimum efficiency.

"Our proposed solution of the problem of providing the control facilities necessary for automatic supervision of the scheduled operation is then to provide automatic operation for all scheduled routings that show tangible benefits to the operation and to provide simple human oriented controls for management of exceptional situations," said Kalkhof.

• **Control panels.** A 60-foot control panel will show mainline tracks and stations on the A division (IRT), and a 120-foot panel will cover the B division (BMT and IND).

Dispatchers at pushbutton consoles will be able to take over automatic routing of trains to change routes, should the situation require such action.

• **Voice contacts.** Also at NYCTA Jay street headquarters in Brooklyn will be consoles for voice communications to various field headquarters, two-way radio links to moving trains and loudspeaker systems at stations.

Action coming up in firemen-on dispute?

Nobody really expected mediation efforts to have much effect in the bring-back-the-fireman battle being waged by the Brotherhood of Locomotive Firemen & Enginemen. So it should come as no surprise that already there's talk of a proffer of arbitration by the National Mediation Board, as conferences seem to be going nowhere. By one estimate, the proffer could come any time. By another, all concerned may want to take a reading on Nov. 5 election results. Under no circumstance, however, is there much thought that the dispute will actually wind up in arbitration, under Railway Labor Act terms.

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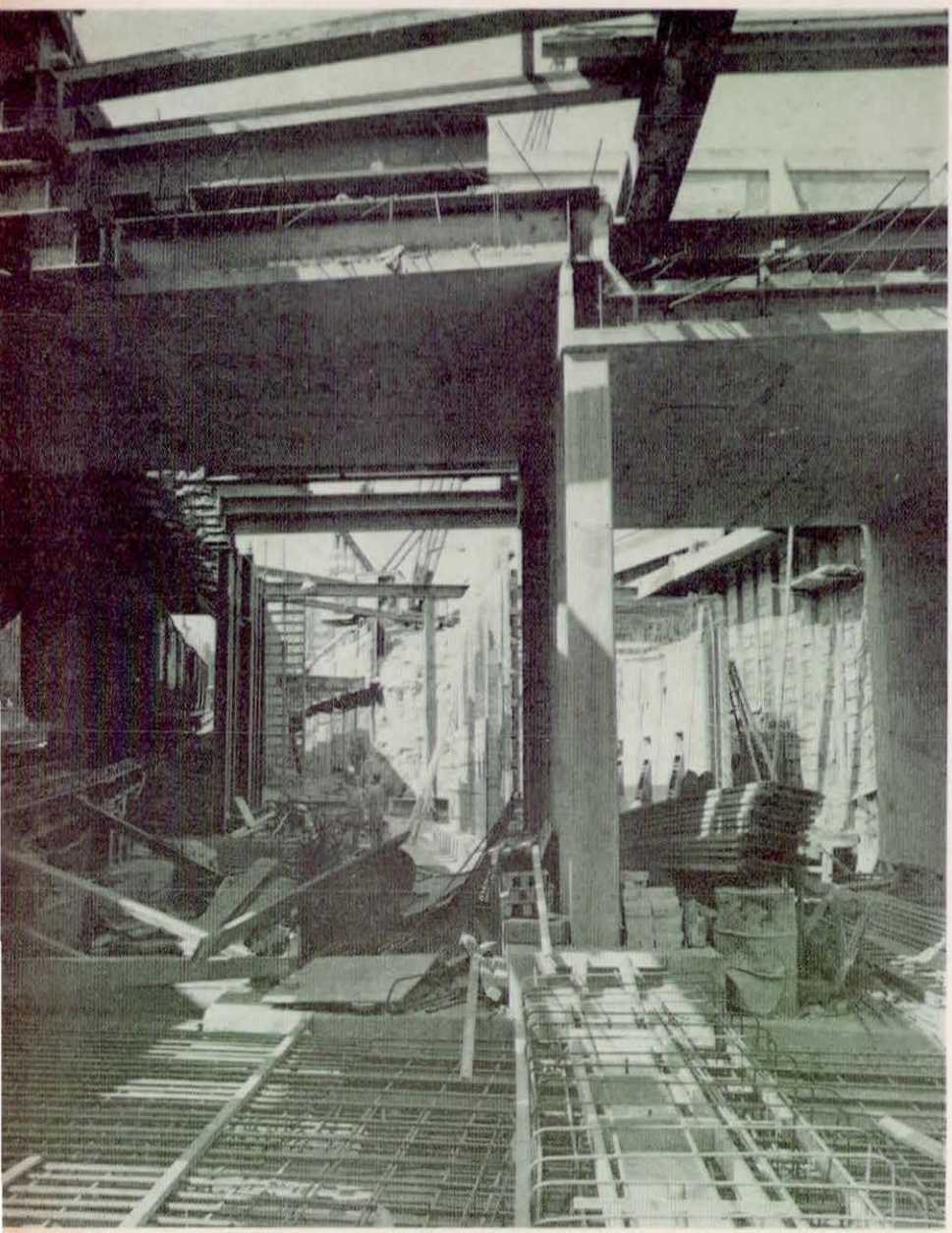
BOSTON:

Lots of plans — but also lots

Making transit function regionally was pioneered in the Boston area. It hasn't been all clear sailing



Construction of a new Charles River tunnel (approach shown here and on cover) leading northward is almost done. South Shore extension is due in service by the end of 1969. Still other digging jobs are moving along.

By JOE ASHER Transit Editor

Transit experts all over the country are keeping a sharp eye turned on Boston. The Hub City was a pioneer in integrating transit planning with regional planning, and the experts want to see how it turns out.

The big policy change was made in 1964 by the Massachusetts legislature. The old Metropolitan Transit Authority, which ran rapid transit, trackless trolleys and busses in Boston, was transformed into the Massachusetts Bay Transportation Authority, which was charged with coordinating and in some cases absorbing outright all public transport in Boston and the surrounding 78 suburban communities in the metropolitan area.

The legislature also took the then novel step of authorizing a $225 million bond issue, to be financed through a tobacco tax, to underwrite capital improvements to the system.

● **Master plan.** MBTA officials took about a year and a half to draw up a master plan for the region, working closely with the Boston Redevelopment Authority, regional planning agencies, and all under the eye of an advisory council from 79 political jurisdictions. (RA, June 6, 1966, p. 20).

The final plan called for construction of about 30 miles of new line, absorption of several local bus lines, purchase of new transit cars and busses, renovation of existing plant, and progressive integration of rail commuter services provided by the Boston & Maine and the New Haven.

Together with federal and other local contributions, the capital improvement program was given a price tag of $369 million.

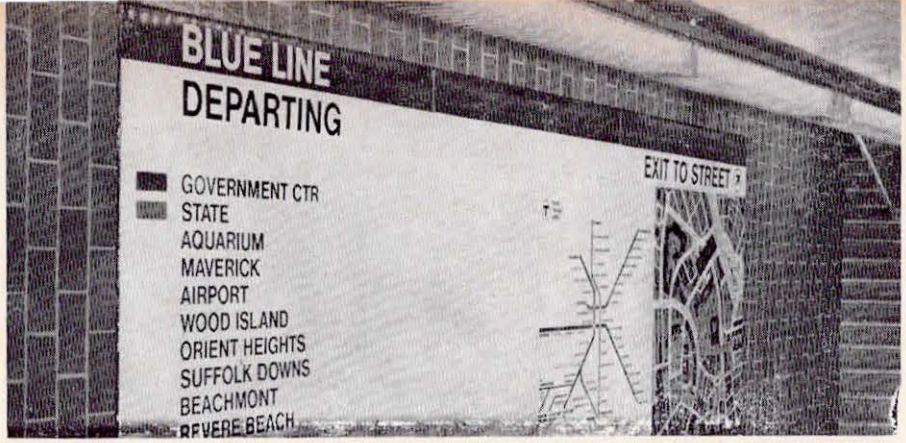
How is it working out? A visiting English urban expert thought, "One layer of control too many, but otherwise a model for others to follow."

He was referring to the advisory council, to which the MBTA board is responsible, and which is in turn a creature of the state legislature.

● **All isn't rosy.** MBTA officials admit certain things are not going the way they should—but they are not ready to say the new regional setup is

# of action

—but Boston moves ahead



Rebuilt stations like Bowdoin (above) have sophisticated graphics, colorful deco

structurally at fault. Furthermore, they have not allowed plans to gather dust if they can't be carried out strictly according to the original program.

Present problems are these:

—The construction program, although in high gear, is behind schedule.

—Delays in construction mean that inflation is eating away at funds earmarked for it.

—Operating deficits are persistently high.

Part of the difficulty lies in getting Boston plus 78 other communities to agree on fiscal matters and route alignment.

Part lies in the fact that the transformation from MTA to MBTA had to be more than a change in name, if it was to live up to advance billing. Important structural changes in the organization were made to take account of a wider area of responsibility. Introduction of systems analysis and computer simulation techniques did much to refine traffic projections, proposed route alignments, costing and other matters —but it took time.

The burr under the saddle for local residents is of course the operating deficit — which was $30 million this year and projected to be $40 million next year (a 13-month fiscal year, actually).

It should be borne in mind, though, that MBTA requests for a fare increase to at least partly cover wage and pension increases were turned down. It is doubtful if Boston and the 78 surrounding communities will turn this down again.

It can be seen that substituting regional transport agencies for municipal ones is no magic panacea. The same problems still show up: Lack of sufficient funds, political vulnerability and rivalry between communities — this time armed with the added weapon of separate legal jurisdications.

- **Vote of confidence.** Nevertheless, MBTA officials think a start has been made in getting people to think regionally, and that most difficulties are momentary ones. They cite the fact that another planning body, the Eastern Massachusetts Regional Planning Project is on the point of issuing its own report. This body, they note, not only endorses MBTA plans but wants MBTA to carry them further. That vote of confidence convinces them they are on the right road.

In any case, the master transit plan is being carried out. Every major aspect of the plan is being pursued to some degree, and in certain areas — the amount of activity is high.

- **New cars coming** Next April, 76

(*Continued on page 25*

Under the sign of Leo

Get ten transit officials in the same room and you're liable to get 11 opinions—on anything. And when conversation in the corridors at transit meetings turns to personalities, the fur really starts flying.

"X doesn't know his car specs from a hole in the ground."

"Y is in good with the Mayor. That's the only reason he wasn't sacked."

Strangely exempt from being the target of this sort of talk is MBTA General Manager Leo J. Cusick. Comments about him usually wind up, "Leo really knows this business."

Not that opinions of him are invariably kind. Rugged honesty and a sharp tongue are the chief characteristics projected by Boston's top transit man. They can sometimes be a political liability—but it's doubtful if he would have it any other way.

Starting 36 years ago as a brake man on what was then the New York Central, he soon transferred to what was to become the New York City Transit Authority, working his way up through a variety of jobs, winding up in 1966 in the No. 2 operating spot, second to the general manager. Then he was called to Washington to become chief of the Urban Transportation Administration of HUD.

He tends to speak of "My staff" and "My budget" and "My cars," which gives an initial impression of enormous ego. Then he turns around and refuses to take credit for bright ideas originated by subordinates, insisting that they be singled out for praise.

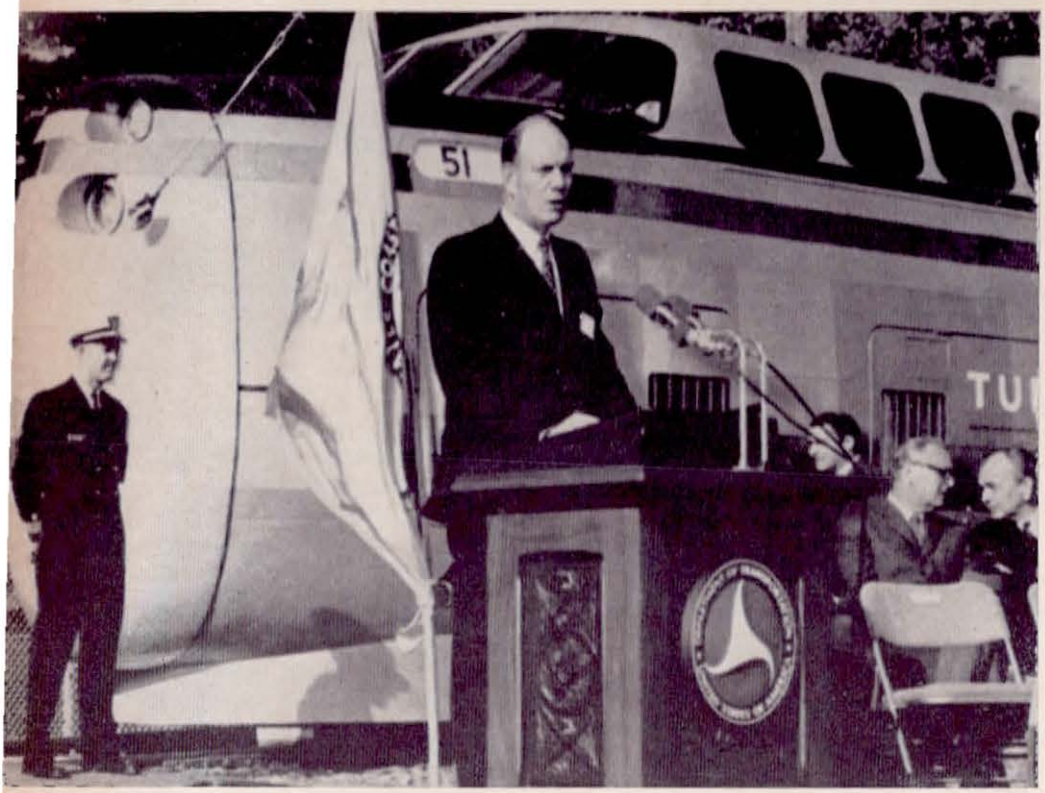
Staffers speak with awe of the way he took complete responsibility for a politically unpopular decision on where to route a new line. Local residents were up in arms about the decision—and he went alone and unescorted to a local meeting hall to explain his reasons for it, braving boos and catcalls.

"I had to leave the car parked a few blocks away," he recalls with a smile.

In discussing administrative changes made since his regime began a year ago, he says he found a relatively new structural setup when he got there, and more or less left it alone. He wanted instead to realign some staff functions, transfer people whose talents he thought misdirected, and reorder the work load where it threatened to bog down.

"What you need to do is take the salt of youth, the yeast of age, and then you come up with a real loaf of bread."

Mr. Boston Transit appears to be full of the salt of youth.



DOT SECRETARY ALAN BOYD accepts the jet-powered trains for the government.

TurboTrains set for Boston service

United Aircraft turned over two three-car sets to DOT, and invited guests rode them. Revenue service should begin soon.

Yes, Virginia, there really is a Turbo-Train. And it should start running by the end of the year, if not sooner.

That is the expectation of United Aircraft, builders of the jet-powered trains for service on the Boston-New York segment of the Northeast Corridor. Technical difficulties delayed introduction of the trains for about a year, but the bugs appear to be cleared up, and regular revenue service is in prospect.

The Department of Transportation, which is sponsoring the High Speed Ground Transportation program, held formal acceptance ceremonies at the U.S. Coast Guard Academy in New London, Conn., to celebrate the fact, and it proved to be a field day for reporters and TV camera-men from the surrounding metropolitan areas.

With flags flying, the Coast Guard Band playing, and the Academy's mid-shipmen standing at ease on the parade grounds, one top government or rail-road official after another was intro-duced. All spoke briefly and to the point: The new trains demonstrate what can be done, if there is a will to do something.

Reporters and invited guests then climbed aboard the trains and rode them, one party going up to Boston, the other down to New York. The consensus of opinion among riders: An exciting glimpse of train travel in the future, although some noted minor drawbacks.

In sheer numbers alone, the turn-out of top people concerned about trans-portation was impressive. DOT Secre-tary Alan Boyd was on hand to accept the trains personally on behalf of the federal government; with him were John Robson, DOT Under Secretary, and Dr. Robert Nelson, director of DOT's Office of High Speed Ground Transportation.

Said Boyd: "For Robert Nelson and his hard-working staff, it represents an end to worrying about whether they could get this train started. Now, all they have to worry about is whether they can get it stopped."

AAR President Thomas Goodfellow was there; so was Katy President John W. Barriger; ICC Vice Chairman Vir-ginia Mae Brown; and representing the New Haven, over whose tracks the trains will run, C. A. Goodwin, vice president passenger traffic.

• **High speed pioneer.** There was a note of drama in the presence of Sen. Claiborne Pell (D.—R.I.)—the man who launched a campaign five years ago to bring high-speed trains to the Northeast Corridor, and who won two presidents and a balky congress around to the idea in the ensuing years.

Other elected officials were Gov. John Dempsey (Conn.); Sen. Abraham Ribi-coff (Conn.); and Sen. John Pastore (R.I.). Joining the Boston-bound train at Providence was Gov. John Volpe (Mass.). Before then, the trains had been given a champagne baptism, navy-style, by Mrs. Alan Boyd.

• **Top speed—110 mph.** And the train-ride itself? New Haven speed restrictions are normally 79 mph, but were relaxed on open, level stretches to permit speeds up to 110 mph. On previous test runs elsewhere, the trains had done as much as 170 mph.

A few people noted a rocking, jog-ging motion at low speeds. But this was attributed as much to the condition of the New Haven roadbed—especially curvy in the New London vicinity—as to the trains themselves. On open stretches, the engineers opened up the throttle and at speeds between 80 and 110 mph, the ride was smooth.

There was no particular sensation of moving along at a fast clip. A glance over the engineer's shoulder at the speedometer was necessary to establish that the train was in fact shooting down the rails at a speed of 110.

Cab signals took the guesswork out of braking and acceleration. A display panel conveyed instructions, the engi-neer executed them, and transitions went by without lurching.

A few invited guests noted the hum of the jet engines in the course of the trip. This appeared to be well below the threshold of discomfort for most people, and seemed much in tune with the airline-style interiors of the cars. Reclining seats had fold-down trays for meal service, and stewards served the meals from galleys.

UAC officials said there was a possi-bility that service could begin in six weeks or so, depending mainly on the time it takes to train crews. But they held off committing themselves to a definite date, so long as the New Haven's future is cloudy, and the exact date and circumstances of the Penn Central takeover unclear. ■

Joe Asher's

TRANSIT ROUNDUP

BILLIONS THROUGH BOND ISSUES: Major plans for building new systems or refurbishing existing ones are at stake on Nov. 5, when voters say yea or nay to new bond issues.

The Southern California Rapid Transit District proposes construction of a $2.5 billion 89-mile system, to be financed by bonds that would be retired by a one-half cent addition to the sales tax. Given voter approval, actual construction could begin in 1970.

Voters in Atlanta and surrounding counties are being asked to approve a $377 million bond issue, to support construction of a 40-mile system. Strung out through various phases and probably increasing in size to about 60 miles, the total system cost would be on the order of $750 million.

A 97-mile $2.6 billion system is proposed by the Washington Metropolitan Area Transit Authority. Funds would come from Congress, from the District of Columbia, and from surrounding counties in Maryland and Virginia. These last are currently being asked to approve bond issues as follows: Fairfax County, Va. —$9 million; Arlington County, Va.—$54 million; Prince George County, Md.—$88 million. In Montgomery County, Md., no referendum on a $116 million bond issue was necessary, as the bonds were already authorized by the state legislature. In addition, certain individual communities such as Alexandria, and Falls Church and Fairfax City, Va. were to hold referenda on additional bonds totalling $38 million.

A STATE'S MASTER PLAN PROPOSED: In New Jersey, a $640 million bond issue is on the ballot to underwrite a master transportation plan for the state. Of this sum, $200 million would be earmarked for public transportation, principally rail commuter improvements for the Penn Central, Erie Lackawanna and Jersey Central. Over 400 new commuter cars may be ordered, if the bonds are approved.

CLEVELAND AIRPORT LINE DEBUT: Strikes against contractors put Cleveland Transit System somewhat behind schedule in opening the four-mile airport extension. The target date is now Nov. 15. Meanwhile CTS officials are looking into the feasibility of having baggage handlers at Union Terminal downtown, for the convenience of air travelers headed to or from the airport. A park 'n ride lane at Union Terminal was also suggested.

Meanwhile, consultant Wilbur Smith has been saying that Kennedy, O'Hare, Los Angeles and Washington National Airports are engaged in "a losing battle with congestion." Speaking at a transportation engineering conference in Washington, Smith said, "In this country, very little has been done to make the air terminal accessible by all modes of transportation."

SOUTH JERSEY LINE GETS CLOSER: First revenue service on the Delaware River Port Authority's new line to Lindenwold should be Feb. 1—or even possibly just after the beginning of the new year.

FEDERAL GRANTS: Paul Sitton, DOT's Urban Mass Transportation Administrator, announced grants totalling $665,000 to six communities for technical studies related to urban transport problems.

A $266,000 grant goes to Dade County, Fla. (Miami) for work on transport plans and recommendations. A $177,000 grant goes to Chicago for study of coordinated bus and rail transit for the South Side of Chicago and nearby suburbs. A $47,000 grant goes to Skokie, Ill. for studies related to better coordination of mass transport in the area. Other grants go to Erie, Pa.; Eugene Ore.; and San Jose, Calif.

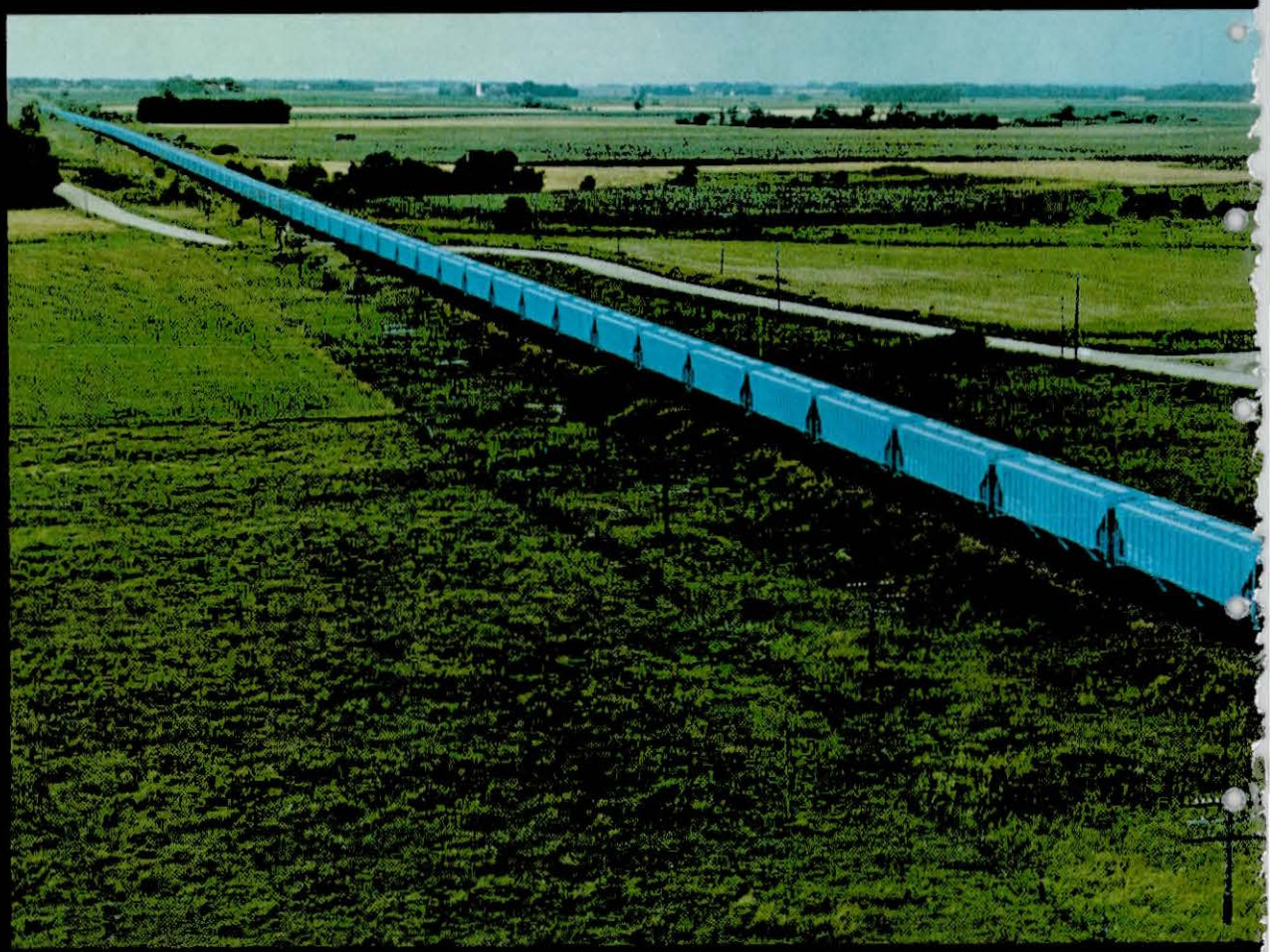
URBAN TRANSPORT TEAMWORK: DOT Secretary Alan Boyd announced formation of an Urban Transportation Coordination Group, to aid in coordinating various DOT programs as they relate to urban transport problems. Chaired by Under Secretary John Robson, the new group has nine other members, including representatives of the Federal Railroad Administration, Federal Aviation Administration, Federal Highway Administration, plus senior policy, public affairs, and research staffers.

BETTER STATIONS FOR NEW YORK: A group of citizens was not satisfied with the way subway stations in New York look and decided to do something about it. Peter Sharp, a real estate developer, formed a group called the Fund for Better Subway Stations. In an initial move, the nonprofit group put up $450,000 to help modernize the 51st St. station on the IRT Lexington Ave. line. The Metropolitan Transportation Authority, drawing on funds from the city's capital budget, matched the sum with the same amount. Accordingly, the new station will get glazed bronze brick walls, fluorescent lighting, a new type of tile, and maybe even some pictures or sculpture.

Meanwhile, the New York City Transit Authority already had an application in to DOT for a grant to give the BMT 49th St. station a face lift. DOT approved it and put up half the $2 million it will cost to install new lighting, heating, ventilating and other equipment.

Between one thing and another, New York stations are in for a massive change in looks. At ceremonies for unveiling of Budd's new Metropolitan cars for the LIRR, GE officials announced they would contribute $15,000 to help in sprucing up stations.

Awareness of the need is growing everywhere. Consultants in architecture and graphics are collaborating on all the planned new system, plus most existing ones.



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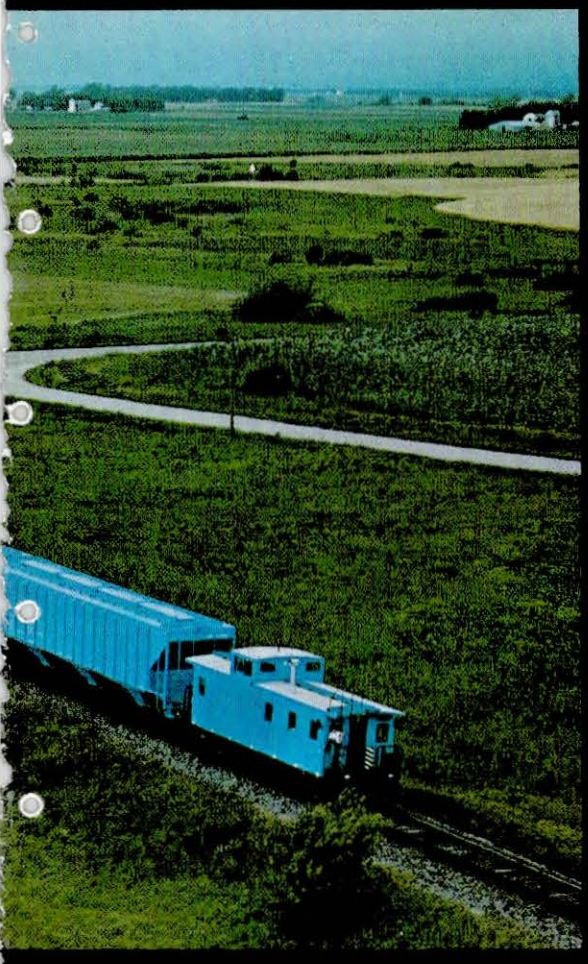

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FRANK MALONE

WATCHING WASHINGTON

WILL COMMERCE LINEUPS CHANGE? It could happen that election day will cause small change in the lineups of two Congressional committees that affect railroad fortunes. These are the Senate Commerce Committee and the House Interstate and Foreign Commerce Committee. It's also possible the election will bring a major change, especially for committee leadership. Whether a change would be welcome or not would remain to be seen, but some rail men wouldn't mind the opportunity to find out. Relations could be better.

FIRST GLANCE: SMALL SENATE CHANGE. Consider the Senate Commerce Committee. Of the 18 members, 10 don't have to run because they aren't among the one third of the Senators whose terms expire. Of those whose terms have run out, two are not running. Of the six who are, only two seem to face much opposition.

MAGNUSON LOOKS GOOD. Apparently ahead are Committee Chairman Warren G. Magnuson (D.-Wash.), the passenger-train champion, Sen. Ernest F. Hollings (D.-S.C.) and Sen. Norris Cotton (R.-N.H.). In the unlikely event that Magnuson is defeated, Sen. John O. Pastore (D.-R.I.), a train buff, would become committee chairman. Also, if there's a GOP sweep, the somewhat less rail minded Sen. Cotton would take over the committee. Elsewhere, Sen. Russell B. Long (D.-La.) has no opponent. Two Commerce members face tough competitors. They are Daniel B. Brewster (D.-Md.) and A. S. Mike Monroney (D.-Okla.). For sure, however, the Committee will get at least two new faces. Sen. Thruston B. Morton (R.-Ky.) has announced retirement. Sen. Frank J. Lausche (D.-Ohio), a railroad friend, was defeated in the May primary.

MUCH COULD HAPPEN IN HOUSE—In the House, there's a different set-up. All members of the Interstate and Foreign Commerce Committee except one will be on the ballot. The present committee chairman is Harley O. Staggers (D.W. Va), whom rail men view something less than enchantment. Staggers's chances are considered good. However, if he were defeated, he'd be succeeded as chairman by Samuel N. Friedel (D.-Md.) whom rail men consider more sympathetic. A Republican landslide would put William L. Springer of Illinois in the chairman's seat. Regardless of how it happens, Springer's ascendancy might be a good thing. While he's not a railroad booster, he's considered sympathetic.

Santa Fe goes to Link for simulator

For mobility, the trainer is to be housed in a rail car.

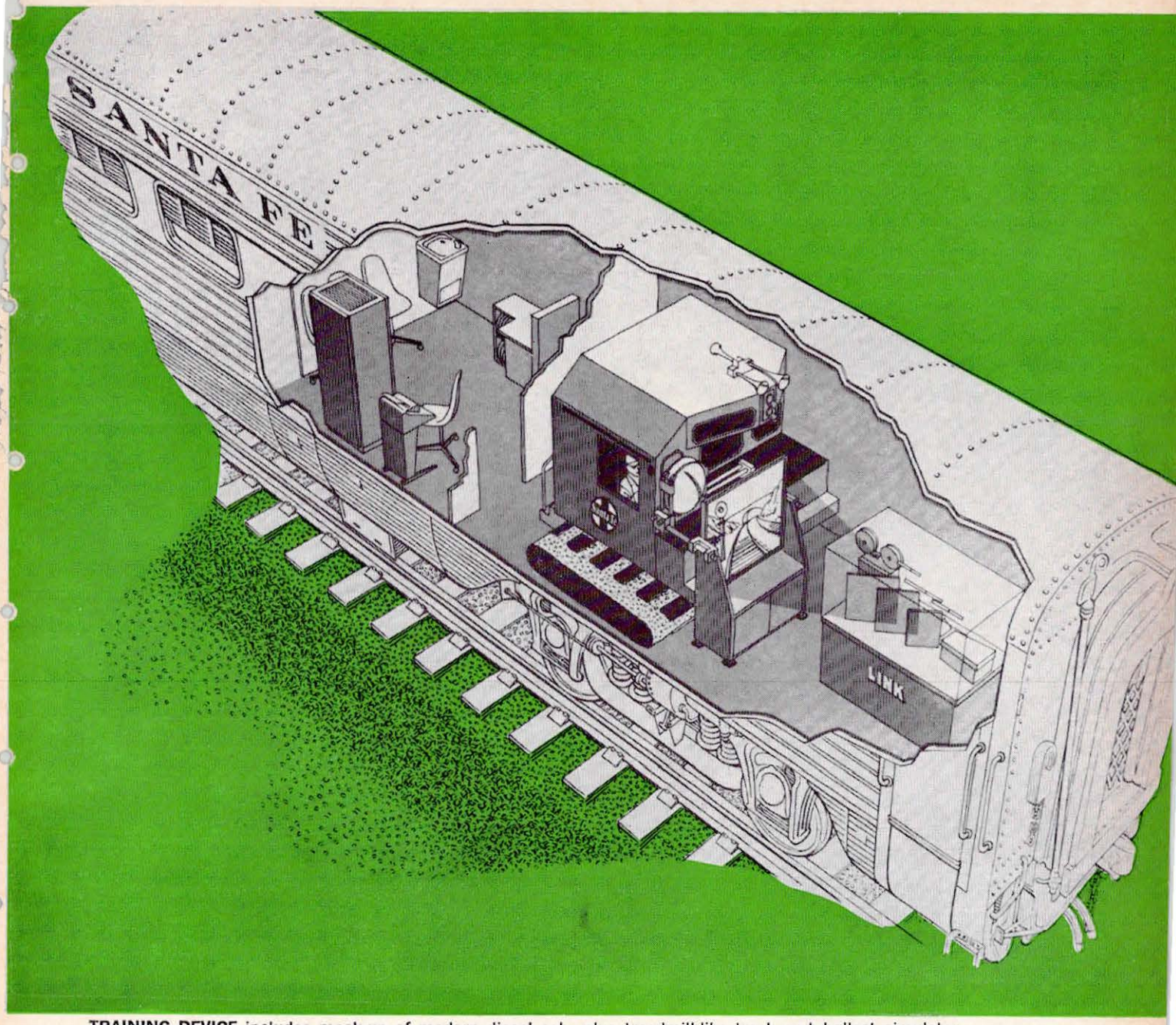
A mobile locomotive/train-operations simulator, costing $750,000, including installation in a railroad car, has been ordered by the Santa Fe from the Link Group of Singer-General Precision, Inc. The device, which will be used for training prospective locomotive enginemen as well as upgrading the skills of existing enginemen, is scheduled for delivery one year from now. Although not the first train-operations simulator ordered by a U.S. railroad, it is the first to have the mobility feature.

In announcing the order, Santa Fe President John S. Reed said that "mobility is important in our first simulator, as it will allow us to utilize it at any point on our railroad." Designing a unit which would fit in the compact confines of a railroad car was one of the complicated engineering tasks encountered by both the road and the builder engineers.

- **Who will be first?** A $1-million order for a simulator was placed last August by the Southern Pacific with Conductron Corp., a McDonnell-Douglas subsidiary and one of six producers, including Link, who have been performing developmental work with railroad-type simulators. The SP's device, unlike the Santa Fe's mobile unit, will be stationary, with installation planned for the Los Angeles area, reportedly at the Alhambra depot. A race for an industry "first" could develop since the SP simulator is also scheduled to be in operation toward the end of 1969.

The Santa Fe simulator will incorporate the latest concepts of aerospace technology, according to Raymond A. Long, Link executive vice president and general manager. Link, developer of the famed Link trainer used by thousands of pilots training for World War II combat, has been a leading producer of simulators and training devices for the past 40 years. It will build the training system at its Operational Training Division, Silver Spring, Md.

- **SD-45 mock-up.** The mobile device, which will be installed in a



TRAINING DEVICE includes mock-up of modern diesel cab, plus treadmill-like track and ballast simulator.

re-vamped passenger train lounge car, will feature a full-scale mock-up of a modern diesel locomotive cab modeled along the lines of Electro-Motive's 3,600 hp SD-45 unit. The mock-up will come complete with throttle, brake, and other controls and gauges.

Looking ahead from his cab seat, an operator will see a screen on which will be projected a realistic image of exactly what an engineer might see during an actual run. A 4,000 ft. 16 mm film, which will be produced jointly by the Santa Fe and Link, will depict the run. The operator will view the film through a collimating lens mounted before the cab's front window which will display the images up to infinity with realistic depth. This lens is designed to force the viewer to re-focus his eyes just as he must do normally when looking at objects varying in distance.

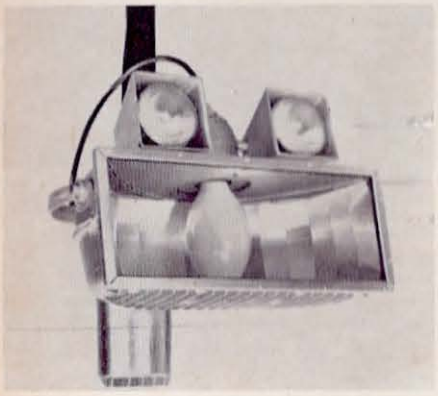
Also as a visual aid in training, a track and ballast simulator resembling a treadmill will be installed below the cab's right window. It will be synchronized with the locomotive's speed up to 10 mph, which is a critical speed range for enginemen when starting a train.

● **Motion plus sound.** Sounds, in realistic stereophonic, and motions—fore and aft shocks, side sway and roll cab vibrations—will also be authentically reproduced. The motion system will be similar in design to those used in Link's flight trainers.

The sight-sound-motion-cab control subsystems of the simulator will be synchronized and operated by a high-speed digital computer that solves in real time the math model equations produced by the simulation. The equations govern locomotive characteristics, track conditions, train loads and track profile. An instructor's station will be located towards the rear of the cab from where a multitude of training problems can be inserted into the individual's program.

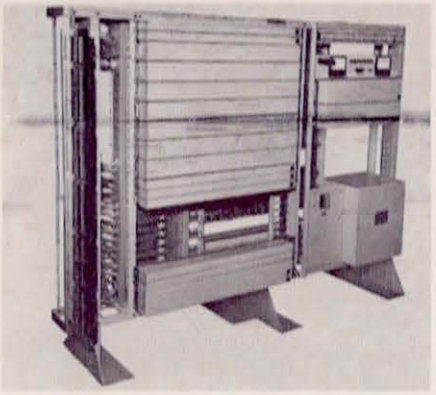
As far back as a year-and-a-half ago, Reed hinted that railway simulators might be on their way and that their costs could be justified. He said at the time, in an address before the Railway Systems and Management Association, that the Santa Fe was reviewing the traditional "education by osmosis" learning process. ■

NEW PRODUCTS REPORT



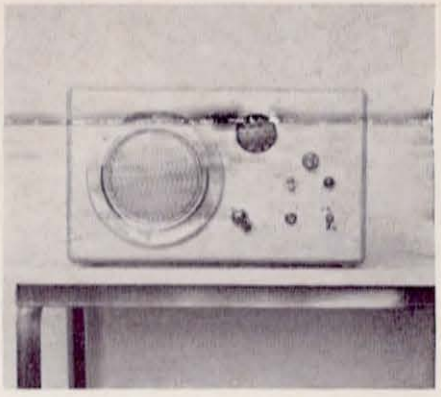
Floodlights (RA-1)

Ballasts with solid-state circuitry in the Continuous-Lite floodlights selectively operate with high-intensity discharge or incandescent light sources. Light is normally provided by the discharge lamp, but if a momentary power failure or severe power dip extinguishes lamp, ballast will automatically operate incandescent lamps until discharge lamp restrikes. The CLP and CLQ versions operate on all standard voltages. *Wide-Lite Corp.*



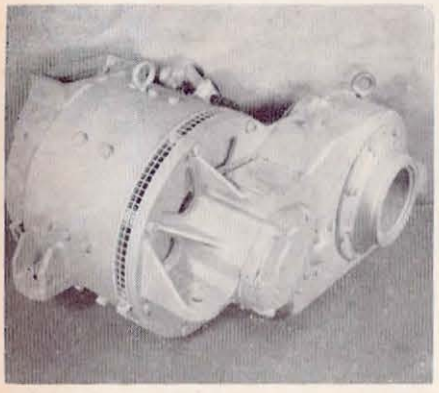
Dial system (RA-2)

A new low cost, off-the-shelf, dial system now ready for use by railroads provides the nerve center for a communication operation of 100 lines and 15 links including as many as 10 trunk lines. Two trunk routes are provided. For each trunk not equipped, one additional station is available. Executive right-of-way and frequency selective ringing are standard features. The XY universal switch provides connection to any of 100 circuits. *Stromberg-Carlson.*



Intercom (RA-3)

Two new solid state intercom desk loudspeakers, the CDX-301 and CEX-302 are designed for use on 600-ohm lines. They have their own power supplies. The on-off switch, indicator light, and volume control are on the face of the panel of both units. The CDX-302 panel has switches for push-to-talk and for ringing power to be placed on the line. They measure 5¾ in. wide, 7½ in. in height, 12¼ in. in length. *Western Railroad Supply Co.*



Traction drive (RA-4)

Four of the 300-hp Tracpak drive units are installed on each of the 31 Westinghouse-equipped electric multiple-unit cars for Northeast Corridor demonstration service. The drive combines a high-performance d-c traction motor and a parallel double-reduction gear unit into an integral assembly which can be applied to either outboard- or inboard-journal trucks. A solid-state Varitran propulsion control incorporates an automatic speed-maintaining system which will hold any speed from 0 to 160 mph which has been set by the operator. *Westinghouse Electric.*

Solid-shank coupler (RA-5)

A solid-shank Type E coupler, for unit-train and heavy-service cars incorporates a completely solid section throughout the keyslot and butt areas. The result is a substantial increase in shank strength to withstand the high forces associated with repetitive run-out and run-in of free slack. For additional strength, the coupler is furnished quenched and tempered to AAR M-201 Grade E 120/100 material specification. The special shank has a recessed bottom wear plate. *McConway & Torley Corp.*

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PEOPLE IN THE NEWS

BALTIMORE & OHIO.—A. J. Scarpino appointed district sales manager, perishable and livestock, Philadelphia. **D. J. McLean** named customer service manager, Cleveland.

CHESAPEAKE & OHIO.—W. C. Anspach appointed district sales manager, trailer service, Chicago. **W. H. O'Connor, Jr.,** sales representative, Grand Rapids, Mich., promoted to assistant district sales manager there. **R. J. Knotek** named assistant to manager coal rates, Richmond, Va. **R. H. Tucker** appointed assistant general real estate agent, Huntington, W. Va.

CHESAPEAKE & OHIO—BALTIMORE & OHIO.—S. F. Hicks, Jr., appointed assistant superintendent costs—transportation, Pittsburgh. **M. J. Verostic** named assistant superintendent costs—methods, Baltimore. **G. C. Totty** appointed general real estate agent, Baltimore. **C. R. Haskins** named assistant director labor relations, Huntington, W. Va.

GEORGIA & FLORIDA.—J. P. Belvin, president, named chairman of the board, effective Nov. 1. **W. Graham Claytor, Jr.,** president of the **Southern,** has assumed the duties of president and chief executive officer of the G&F, which is a Southern subsidiary.

LEHIGH VALLEY.—J. P. Donohue appointed general agent, Newark, N.J. **R. D. Price** named general agent, St. Louis, Mo., succeeding **R. K. Lloyd,** promoted to Canadian freight traffic manager.

NORFOLK & WESTERN.—Richard W. Kienle has joined the law department as assistant general attorney, Roanoke, Va. He was formerly commerce counsel, New York Central (now Penn Central).

Dr. John K. Humphries, assistant medical director, promoted to medical director, succeeding the late **Dr. John W. Houk.**

PENN CENTRAL.—Theodore K. Warner, Jr., vice president—taxes, Philadelphia, appointed to the new position of vice president—accounting and taxes. **Charles S. Hill,** assistant vice president—accounting, appointed comptroller, a new position. Other PC officers assigned to Mr. Warner's staff in their present capacities are: **William C. Antoine,** assistant vice president—taxes; **James J. McTernan,** assistant vice president—budgets and controls, both at Philadelphia, and **Robert E. Kappauf,** assistant vice president, New York.

Edward J. Gaynor, passenger agent, Newark, N.J., transferred to Pennsylvania Station, New York. He will be in charge of ticket sales reservation and information services.

SEABOARD COAST LINE.—W. T. Marable, assistant to president, Jacksonville, Fla., retired Sept. 30, after 50 years of service.

Philip J. Lee, vice president—traffic, Jacksonville, Fla., and **Howard P. Toxey,** vice president—freight traffic, Richmond, Va., retired Oct. 31. **Horace M. Emerson,** senior assistant vice president—traffic, Jacksonville elected vice president—freight traffic there. **J. R. Getty,** vice president—passenger traffic, Richmond, will report directly to the president.

SOUTHERN.—Robert J. Stall, Jr., appointed manager of the newly created research and planning division, Industrial Development, Washington, D.C. He was formerly executive vice president, Cleveland (Tenn.) Chamber of Commerce.

SOUTHERN PACIFIC.—E. L. Johnson named to the newly established position of assistant to general auditor.

TRANSIT

Stanley D. Forsythe, transit adviser to the general manager, **San Francisco Bay Area Rapid Transit District,** left that post on Nov. 1 to join **W. C. Gilman & Co., Inc.,** transportation consultants, of Cleveland, Ohio.

Edward W. Tobin, former administrative secretary, **Institute of Rapid Transit,** Chicago, appointed an associate, **W. C. Gilman & Co.,** Cleveland.

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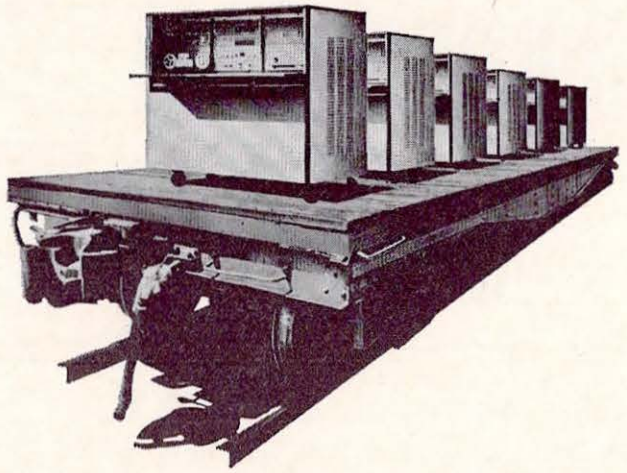

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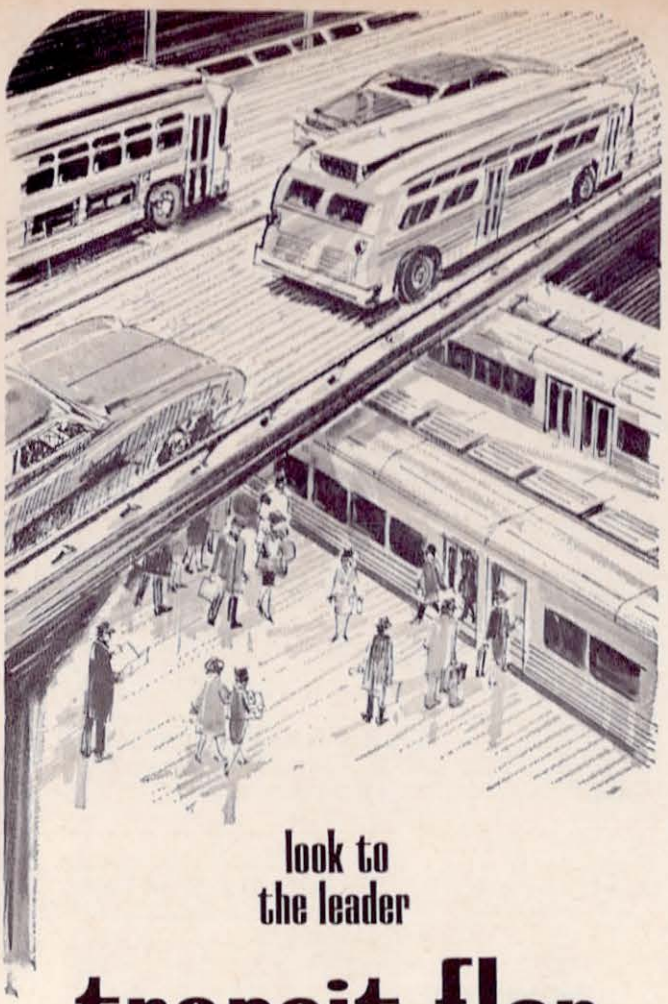

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It's superior performance year after year that makes a leader stand out above the rest. We've been blending durability, safety, and eye-appeal into Transit-Flor rubber flooring for many years . . . providing the transit industry with maximum quality for best performance.

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Circle 12 on coupon page 22

TRANSIT OVERSEAS

MEXICO CITY METRO OPENS IN '69: The first eight-mile leg of the 21-mile system is due to be in service by next June. Four miles of tunnelling have been completed, and almost that much of lining and ceiling. With the Olympic Games out of the way, work is expected to proceed far more rapidly. French-built rubber-tired cars and automatic train controls will be installed.

SUCCESS IN ROTTERDAM: Opened last February, the new Metro proved such a success that 16 more cars had to be ordered. Traffic across the Maas River used to average 85,000 riders daily by bus and tram; now it's gone up to 105,000—90,000 of them using the Metro.

HELSINKI WILL BUILD SOON: Although a 27-mile double-tracked system has been on the drawing board since 1966, local officials hesitated over how much to do immediately. A five-man Metro Commission drew up an action program for a 7.2-mile system to begin construction immediately. Tenders on 75 cars and semi-automatic control equipment should be out early next year.

FRANKFURT GOES TO HEAVY-TYPE TRANSIT: As reported last month, the U-Bahn opened the first five-mile section adapted for full-scale rapid transit. The 32 new cars have speed control equipment, and stations are under TV surveillance.

MADRID SYSTEM KEEPS GROWING: The government approved construction of 36 miles of additional line over the next 12 years. One new line came into service earlier this year, and 60 cars were added.

MEGALOPOLIS IN GERMANY: A string of densely populated cities around Cologne, Dusseldorf and Essen prompted German Federal Railways to plan a kind of high-speed transit service linking major centres. Work has already begun, and the system will be in high gear in the 1970s.

OSAKA WANTS TRANSIT TO THE FAIR: The 1970 World's Fair will be held in Osaka, and local transit officials are getting ready for it now. Transit lines will be extended to the fair grounds and new air-conditioned cars ordered.

MOSCOW ADDS NEW LINES: A high rate of housing construction is prompting rapid extension of Metro lines. Officials said 34 miles of new line would be added by 1975. A second belt line around the city is already under way.

MORE SYSTEMS PLANNED: Venice, Naples and Amsterdam are all studying proposals for building rapid transit systems. On the basis of experience in Rotterdam and San Francisco, engineers in Venice and Amsterdam see no problem in digging through heavily water-logged soil. The Amsterdam proposal looks like an early action project, with a $480 million price tag and preliminary engineering studies made. Venice already has land-use studies, and Naples is somewhere in the middle studying financial and traffic projections. Meanwhile, Glasgow civic officials are considering a $170 million plan to add new rail lines.

Boston's emphasis is on digging

(*Continued from page 15*)

new aluminum air-conditioned cars will be delivered by Pullman-Standard. Six dreary downtown stations have been redesigned and rebuilt; more will follow. Cab signaling is to be introduced on the South Shore extension, as well as automatic car identification.

Investigation of automatic fare collection is going on. Express bus service has been promising and will probably be tried more widely. Experiments are being made in Dial-A-Bus, (a kind of door-to-door bus service); and in reverse commute bus service to bring core-area workers to plants in outlying areas. Middle and upper echelon MBTA officials were encouraged to take full advantage of management courses and seminars at universities, under a federally aided program.

Given time, there will be other initiatives. MBTA officials speak of a complete change in method of operation of the Riverside branch, now worked with PCC's. Decentralized transit car shops, one for each line, have been spoken of.

● **Lines extended.** But by far, the biggest activity now is in the field of new construction. In another month, there will be ground-breaking for a new southwest extension, as called for in the master plan. Although the route alignment is not in all respects settled, it is known that the line will make use of a median strip in a highway.

To the north, construction of a new tunnel under the Charles River is in most respects complete.

Biggest project now going on is the South Shore extension. This is a ten-mile line following the New Haven's Old Colony route to Quincy and Braintree and discontinued some years back. The MBTA line uses the same right of way, but upgraded to new standards, and will hook it into the Cambridge-Dorchester line. At a later stage, the line will continue for another six miles.

Although most of an existing right of way was used, the new line nonetheless called for many important new structures. The most important of these is the 1,200-ft bridge over the Neponset River, now virtually complete except for laying of continuous welded rail and installation of signalling.

Two substation buildings are also being built along this line, and six smaller bridges — three of them called instant bridges because the total spans were built elsewhere, then lowered intact into position.

Says Leo J. Cusick, MBTA general Manager: "We should be ready for Quincy service by Christmas, 1969." ■

Remember when
freight conductors doubled
as firemen
for a pot-bellied stove?

International went to work
on that one, too

Time was when, to keep warm, everybody in the caboose had to belly up to a pot-bellied stove. It required as much stoking as the locomotive and served as a drier, a heater and a cook stove.

International Caboose experts antiquated that deal when, under the heading of progress, things changed to oil and propane gas and now to infra-red heaters that provide even heat from one end of the car to the other.

It's another example of the comfort, the safety and the service built into every International Caboose.

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A Part of NATIONWIDE INDUSTRIES, INC.

Circle 13 on coupon page 22

What's anything doing out in

There isn't much out, that's true. A busy signal is all you get from airport and highway department.

But trains are going through. Makes you think.

Here's a form of transportation that brings tremendous power and carrying capacity to bear on quite a narrow strip of real estate. And easier (narrower) snow removal ...one of the benefits . . .

...about all the land that's left for people?

They say that four-fifths of downtown Los Angeles is already pavement. No wonder. To match the load-carrying capacity of one track of a double track railroad would take a highway estimated at ten to twenty lanes wide, if you can imagine such a monster.

Or let's say there's fog. Newark's shut down tight. The Jersey Turnpike is closed to trucks and cars. But freight and passenger trains are running. How come?

veather like this?

Because trains are the basic mass transportation method f the future. Only trains have guided movement—key to ıe automated future—a built-in feature of the rails they de on. Trains take less space, their giant engines have reater efficiency, they're easier to move (nothing travels o easily as a steel wheel rolling on a steel rail), they make better use of manpower (only one "driver" is needed up front on a train that may be carrying as many as 2,000 automobiles out of Detroit)!

Today, railroaders are building toward a great future. That's the week to week story of RAILWAY AGE. What a place to talk about the way *you* can help!

Be part of the weekly excitement in **RAILWAY AGE** *the transportation weekly*

William J. Gallagher
Sperry Rail

Robert M. Owen
Sperry Rail

C. W. Smith
IEC-Holden

J. W. Bedbrooke
IEC-Holden

J. C. Hodges
IEC-Holden

R. W. Maddocks
IEC-Holden

SUPPLY TRADE

William J. Gallagher has been appointed general manager, **Sperry Rail Service** operation, **Automation Industries, Inc.,** Danbury, Conn. He was formerly assistant general manager.

Robert M. Owen, operating superintendient, appointed sales manager, with responsibility for sales activities in the rail testing field for the United States, Canada and Mexico.

Canadian Corporate Management Co., Ltd., has announced amalgamation of two of its wholly-owned subsidiaries—**International Equipment Co. Ltd.** and the **Holden Co. Ltd.** under the name **IEC-Holden Ltd.** Offices, warehouses and manufacturing facilities are located across Canada. **A. N. Campbell** will be chairman of IEC-Holden; **E. F. Neale,** vice-chairman; **C. W. Smith,** president; and **J. W. Bedbrooke,** executive vice president. Messrs. Campbell and Smith have been the senior officers of International Equipment and Messrs. Neale and Bedbrooke of the Holden Co. **J. C. Hodges** has been appointed vice president—marketing; and **R. W. Maddocks,** vice president, Railway Division.

Frank A. Bornmann has been elected vice president of Copco Trailers division of **Copco Steel & Engineering Co.,** with headquarters at South Bend, Ind. Mr. Bornmann was a vice president, Binkley Co. for 19 years.

Robert H. Watts and **Adrian A. Walker** have been appointed representatives at Chicago for Garlock railroad products, **Durox Equipment Co.** They will be responsible for sales to railroads with headquarters in Illinois, Wisconsin and Indiana.

R. E. Canzoniero, manager of railway carrier accounts, **Integrated Container Service, Inc.,** New York, has been appointed vice president—sales. **William J. Gestal,** assistant to the president, has been promoted to vice president—operations.

Canadian Cardwell Co. Ltd., has opened a new office-plant at 1875-46th Avenue, Lachine, Quebec, Canada.

Tilghman H. Keiper, Jr., has been named manager of trackwork manufacturing, **Taylor-Wharton Co.,** Easton, Pa., Division of Harsco Corp. Mr. Keiper previously served in the trackwork field with the Frog & Switch Division of Bethlehem Steel Corp. (*Continued on page 37*)

SPENO

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Maintenance Costs
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"RAIL GRINDING"

"Just Ask the Railroads That have used us"

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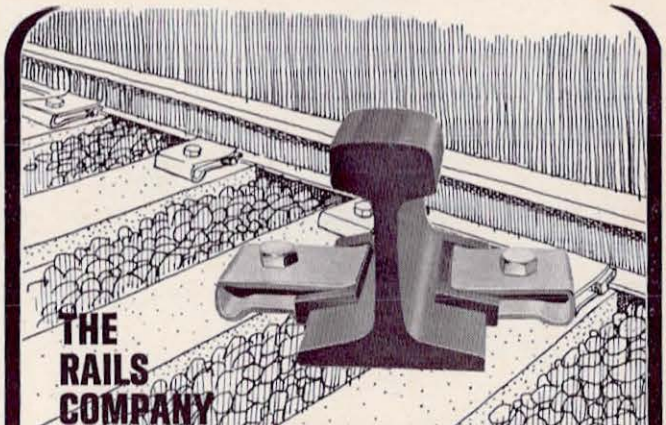
MEMBER RPI RAILWAY PROGRESS INSTITUTE

THE HOLDEN COMPANY, Limited
614 St. James Street, Montreal, P.Q., Canada
(Sales Representative for Canada)

Circle 14 on coupon page 22



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Circle 15 on coupon page 22

Safety pays

Now, two of America's safest investments pay higher interest. U. S. Savings Bonds earn 4.25% and Freedom Shares earn a full 5%, when held to maturity.

Both are part of the surest and soundest employee benefit plan available . . . the Payroll Savings Plan.

Here's how it works.

When your employees purchase Series E Savings Bonds through your company-operated Payroll Savings Plan, they have the option to buy higher-paying Freedom Shares, too, on an approximate one-for-one basis. Only one deduction is necessary to apply toward the Bond/Freedom Share "package."

By promoting the Payroll Savings Plan in your plant, you're helping your employees by providing a convenient, automatic way for them to save. And money saved in this way aids in maintaining the stability of our economy, and helps to protect the value of the dollar — so you're helping your country, too, by encouraging broader participation in the Savings Bonds Program.

A complete kit is available with all the information and material you'll need to set up the Plan, if your company doesn't already have one in operation. Write to The Department of the Treasury, U.S. Savings Bonds Division, Washington, D. C. 20226.

U.S. Savings Bonds, new Freedom Shares

In your plant . . . promote the Payroll Savings Plan for U. S. Savings Bonds.

The U.S. Government does not pay for this advertisement. It is presented as a public service in cooperation with The Department of the Treasury and The Advertising Council.

Tough plastic reduces train weight.

Industrial design of the engineering prototype shown below was created by Sundberg-Ferar, Inc. Southfield, Michigan.

UNIROYAL

Uniroyal thermoplastic Royalite® is lightweight, durable and easy to form and fabricate. It is also more economical than other engineering materials.

The designers of these modern cars for Washington D.C.'s first rapid transit system chose only superior materials for the job.

They chose Royalite 56, a unique ABS thermoplastic sheet for seats (side and back), interior wall panels, window revelles and miscellaneous ferrings in the prototype of the 811-car system.

Royalite 56 is one of a new family of thermoplastic sheet materials developed by Uniroyal to meet the needs of today's space-age transportation vehicles. From high-speed commuter trains to high-speed jets.

Various materials could have been chosen for the job. Why Royalite 56? For one thing, it's self-extinguishing. With greater flame resistance than any other competitive material. And it's light in weight (an important consideration in high-speed vehicles).

In addition, Royalite 56 features high temperature distortion, easy fabrication, toughness and a variety of handsome finishes. To say nothing of its economical price.

Want to meet the other new members of our thermoplastic family? Here they are.

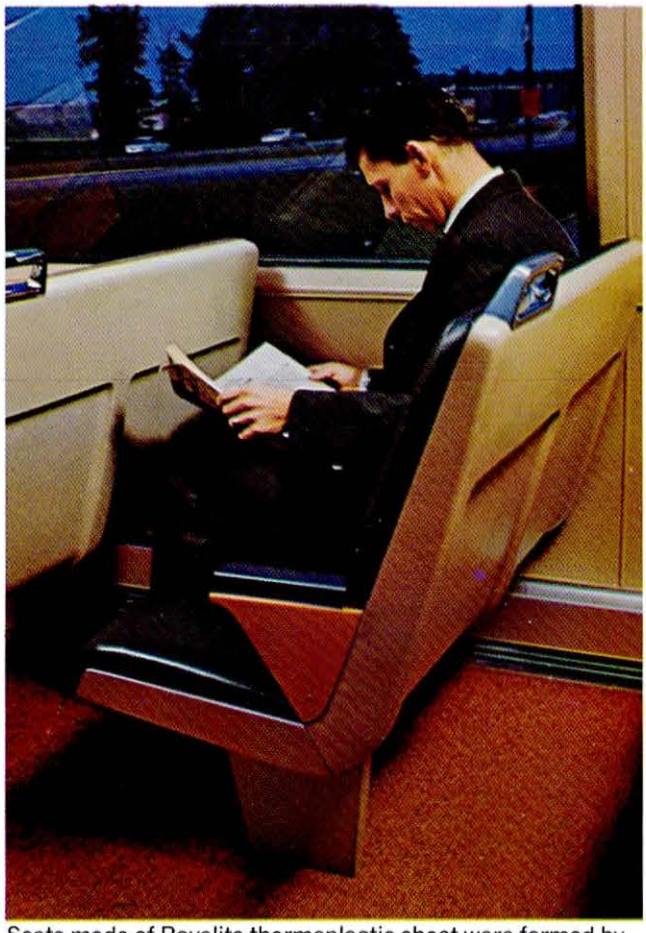
Royalite 54 (ABS compound): Flame resistant, flexible. For use in seating and interior trim. (Chosen for seat coverings in Washington's transit cars.)

Royalite 502 (Proprietary compound): High heat and chemical resistance, good impact and stiffness, high modulus, flame resistant & easy to fabricate.

Royalite 503. Properties similar to Royalite 502. Developed to meet the latest F.A.A. requirements.

Royalite 510 (Polycarbonate compound): Excellent impact strength, high modulus, high heat distortion and excellent flame resistance. For vehicle interiors.

Royalite 520 (Polysulfone compound): High impact strength, high heat distortion and low smoke density. For use throughout entire interior of vehicles.



Seats made of Royalite thermoplastic sheet were formed by Pedco Plastics Corp., Wheaton, Illinois and fabricated by Coach and Car Equipment Corp., Elk Grove Village, Illinois.

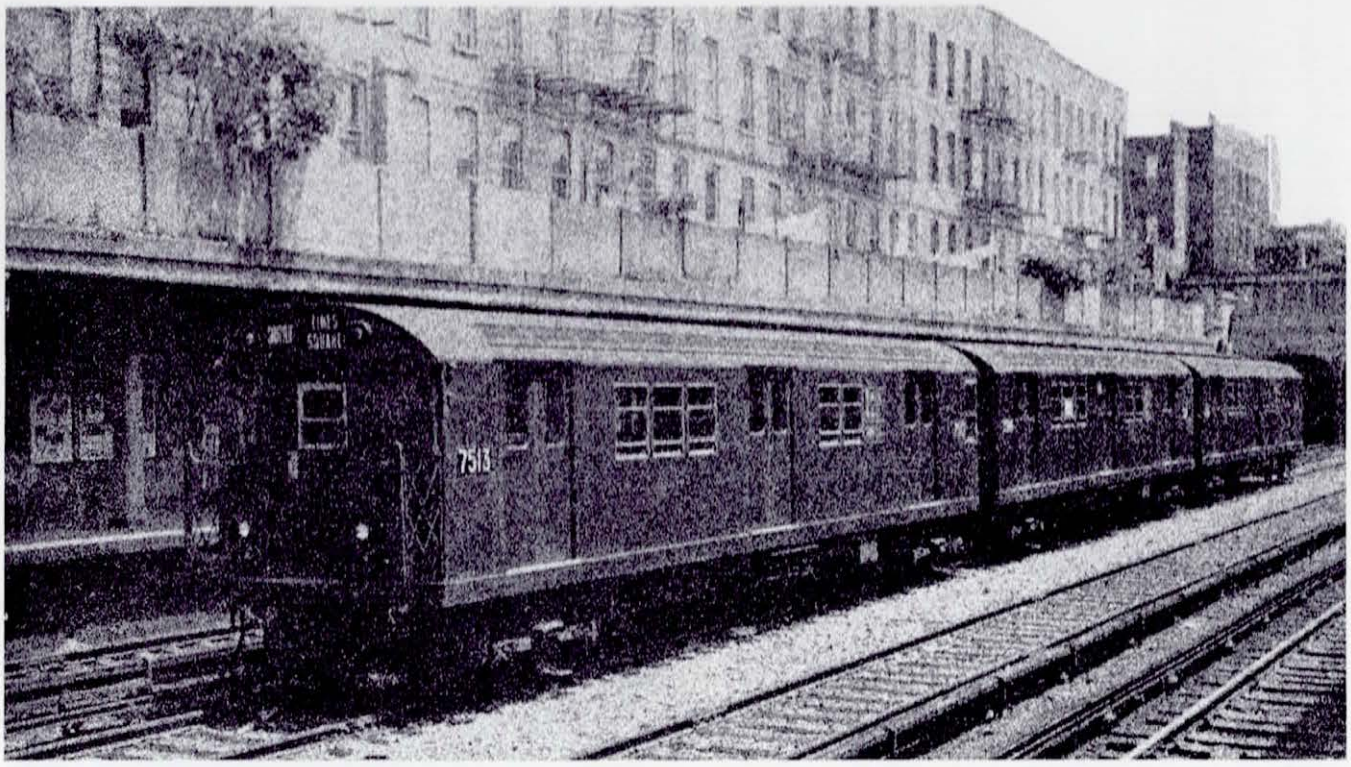
Although Royalite thermoplastics are new to the field of rapid transit cars, they're hardly unproven.

For years, Uniroyal has been producing quality thermoplastic sheet to meet the demanding specifications of the aircraft industry.

And what we can do for jet airliners, we can do for you.

For more information, write Uniroyal Plastic Products, 2638 North Pulaski Rd., Chicago, Illinois 60639.

Royalite is another product of Uniroyal polymer technology.



Brooklyn...1960

And the shuttle train raced down the track on another test run. There were people aboard—GRS engineers—but no one was at the controls. Automation had taken over—including programmed starting, running speed control, precision station stopping, and automatic control of doors and destination signs. The successful tests led to placing the train in regular service between Grand Central and Times Square.

GRS achieved full transit automation long ago—and can do it much better now. Since the Brooklyn tests, we have devised high-frequency jointless track circuits, feedback traction control to ensure smooth, comfortable riding, electronic onboard cab signals and speed control, Wee-Z impedance bonds, high-speed communication systems incorporating micrologic circuits . . . and more.

For information on modern rapid transit signal and control systems, simply write to our transit controls group in Rochester.

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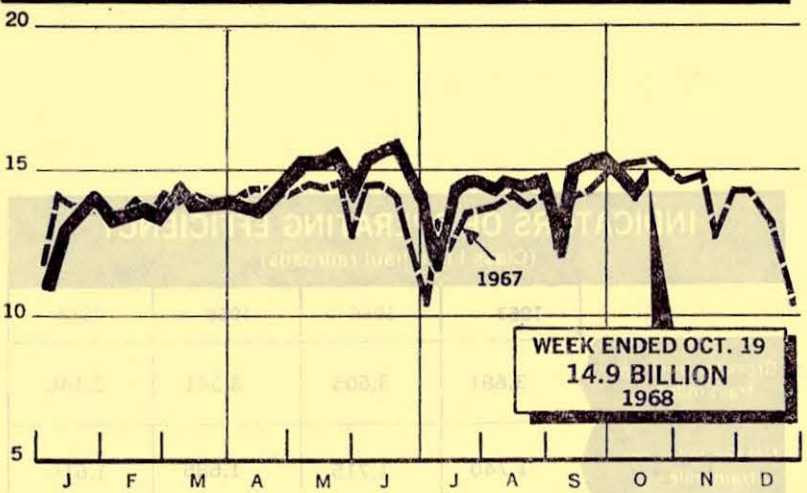
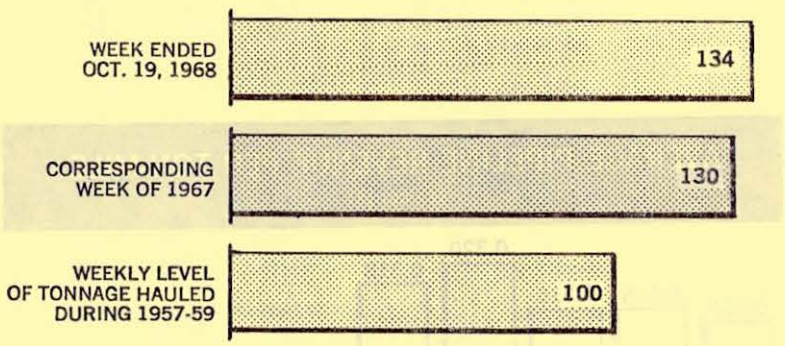
RAIL FREIGHT TRAFFIC TRENDS

BILLION TON-MILES (Estimated)



Source: Association of American Railroads

INDEX OF INTERCITY TRUCK TONNAGE



Source: American Trucking Associations.

Current Statistics

Net income, Class I roads	
Six months, 1968	$284,000,000
Six months, 1967	$265,000,000
New freight cars on order	
Oct. 1, 1968	16,224
Oct. 1, 1967	24,762
New freight cars delivered	
9 months, 1968	43,062
9 months, 1967	66,451
Serviceable cars	
Oct. 1, 1968	1,386,742
Oct. 1, 1967	1,415,518

lat cars from Pullman-
level flats from Bethle-
ew cars purchased since
in service or on order.

ere placed in September
ith 3,156 in the previous
Backlog of new cars on
Oct. 1, compared with
1, 1967.

AND ORDERED
ON OCTOBER 1, 1968

mber	August	September
68	1968	1967
062	2,488	4,344
386	1,272	1,918
448	3,760	6,262
920	964	1,583
368	4,724	7,845
323	3,033	3,948
100	123	660
423	3,156	4,608
0	600	300
423	3,756	4,908

vered

ber 1	Septpember 1	October 1
68	1968	1967
688	11,434	16,249
536	4,822	8,513
224	16,256	24,762
320	6,240	9,996
544	22,496	34,758

high-speed, heavy-duty
$31 million (RA, Sept.
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r SEARCH were placed
&O/B&O and Southern

rder with Motorola for
radios. Motorola's Com-
MOTRAN mobile radios

YOU OUGHT TO KNOW

Loss and damage: not all good, not all bad

Latest available figures on freight loss and damage payout for 1968 won't cause anybody to let up on L&D prevention activities—but, on the other hand, they aren't as bad as they might be. Through six months, payout totaled $93.6 million, up 5.4% from the $88.9 million recorded last year. But, for the 12 months ended June 30, payout was up by only 3.8%. And, on a first-six-months basis, the ratio of payout to revenue dropped.

CTA: In the courts and on the job

Chicago Transit Authority came up as a newsmaker twice last week—once in connection with the August wildcat strike of bus drivers, once as a partner with a Chicago commuter railroad in a joint city-federal-CTA-Chicago & North Western venture called Northwest Passage. In the court case, a judge turned down a complaint by dissident CTA bus drivers which asked for an order requiring the holding of an election to determine a proper bargaining representative. Bus drivers already have a local of the Amalgamated Transit Workers—but the dissidents, most of them Negroes, charge that present leadership, mostly white, is not representative. Meanwhile, CTA and C&NW were looking ahead to a January start of construction on Northwest Passage, which will be a link between CTA's rapid transit lines and Northwestern's commuter operations. One part of the experiment that may bear close watching: the job-opportunity factor, involving provision of better transportation between Chicago's South and West sides and the city's West, Northwest and North suburbs.

Soo Line hails an "exciting expansion"

With merger of Chicago & North Western and Chicago Great Western, Soo Line got access to a growing industrial district south of St. Paul—and to Soo, this shapes up as no small plum. Soo is calling its new operation an "exciting expansion of service territory." The road has put up a new station for the Roseport industrial area; it's promising service at least twice daily, more frequently as volume requires, with the added note that "initially, train schedules will be flexible."

Union Tank plans more diversification

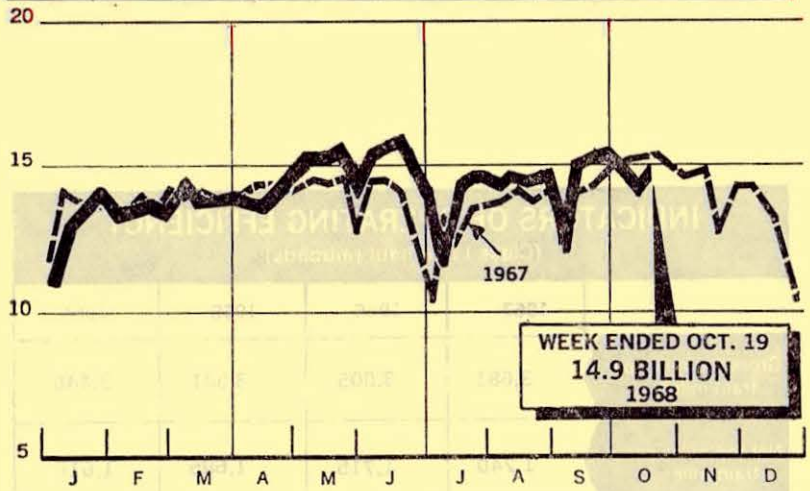
Diversification-bound Union Tank Car Co. is at it again, having agreed to acquire Mec-O-Matic, Inc., manufacturer of materials handling equipment, for more than $1.1 million in Union Tank common stock. The transaction is subject to approval by Union Tank directors and M-O-M stockholders. Earlier this year, Union Tank announced plans to acquire the Credit Bureau of Cook County, Inc., and to purchase two tracts of southern California land at a cost of $16 million (RA, Sept. 23, p.65).

Transport men work as advisers for Nixon Group

The Nixon campaign is being aided by 11 prominent transportation men who form an advisory panel for the Transportation Volunteers for Nixon-Agnew, a committee of United Citizens for Nixon-Agnew. The panel includes: Daniel P. Loomis, Association of American Railroads past president; James M. Symes, Pennsylvania Railroad past president, chairman and chief executive; Harold Cunningham, Goodyear Tire traffic director; E. F. Hamm, Jr., Traffic Service Corp. president; J. W. Hershey, American Commercial Lines president; Clarence A. Kelley, Dixie Ohio Express president; Clarence D. Smith, American Home Products Co. traffic director; Thomas M. Thawley. National Transit Co. president; Robert F. Thompson, Vermont Transit Co. president; Charles E. Walker, Union Barge Line Corp. president; and C. G. Zwingle, Pacific Intermountain Express Co. president.

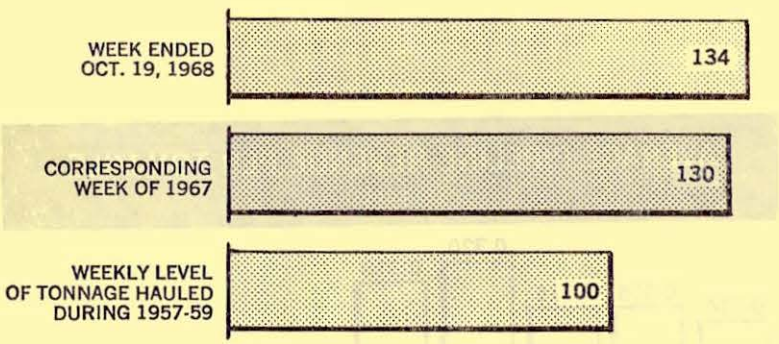
RAIL FREIGHT TRAFFIC TRENDS

BILLION TON-MILES (Estimated)



Source: Association of American Railroads

INDEX OF INTERCITY TRUCK TONNAGE



Source: American Trucking Associations.

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9 months, 1968	43,062
9 months, 1967	66,451
Serviceable cars	
Oct. 1, 1968	1,386,742
Oct. 1, 1967	1,415,518

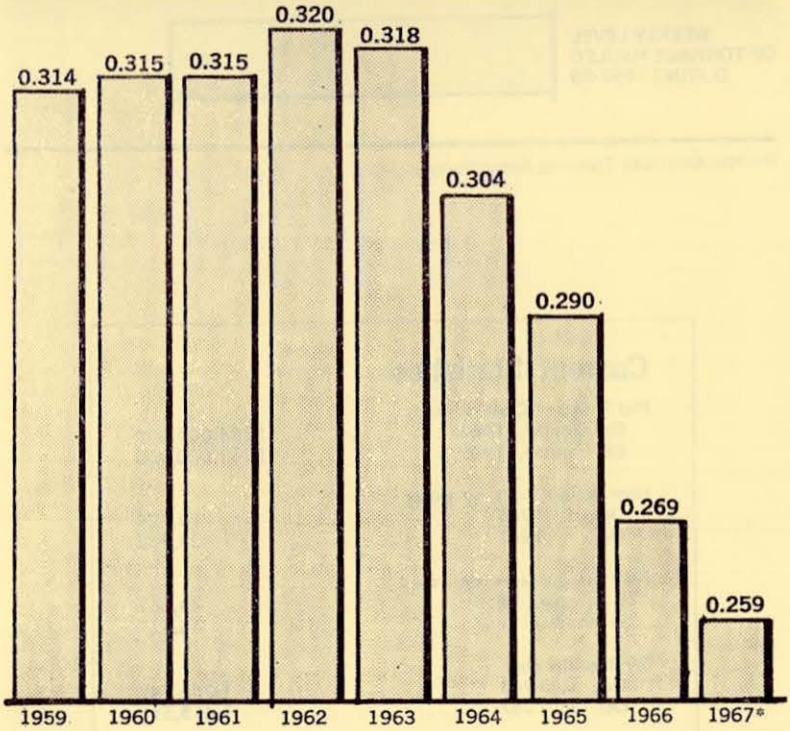
INDICATORS OF OPERATING EFFICIENCY
(Class I line-haul railroads)

	1967	1966	1965	1964
Gross ton-miles per train-mile*	3,681	3,605	3,541	3,448
Net ton-miles per train-mile	1,740	1,715	1,685	1,616
Net ton-miles per freight-car day	1,212	1,252	1,183	1,097
Net ton-miles per loaded car-mile	41.9	41.0	39.7	38.4

*Excludes locomotives and tenders.

Source: Bureau of Economics, ICC.

AVERAGE PIPELINE REVENUE PER TON-MILE
(in cents)



Source: Bureau of Economics, ICC.

*Preliminary

MARKET OUTLOOK

CARLOADINGS

Loadings of revenue freight in the week ended Oct. 26 totaled 597,434 cars, the Association of American Railroads announced on Oct. 31. This was an increase of 35,580 cars, or 6.3% compared with the previous week; an increase of 4,939 cars, or 0.8%, compared with the corresponding week last year; and a decrease of 46,644 cars, or 7.2%, compared with the equivalent 1966 week. Ton-miles generated by carloadings in the week ended Oct. 26 are estimated at 15.8 billion, an increase of 3.9% above the corresponding week of 1967, and 1.2% below the 1966 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Oct. 26

District	1968	1967	1966
Eastern, including Allegheny and Pocatontas	223,296	226,640	255,504
Southern	128,863	121,916	120,443
Total Eastern and Southern Districts	352,159	348,556	375,947
Northwestern	75,151	80,675	90,364
Central Western	126,250	120,611	131,160
Southwestern	43,874	42,563	46,607
Total Western Districts	245,275	243,939	268,131
Total All Roads	597,434	592,495	644,078
Commodities:			
Grain and Grain Products	54,513	55,852	66,387
Livestock	3,582	3,679	5,145
Coal	106,071	110,876	122,259
Coke	6,946	7,282	8,196
Forest Products	45,390	41,277	39,160
Ore	35,651	37,545	46,276
Merchandise l.c.l.	4,388	4,564	6,437
Miscellaneous	340,893	331,420	350,218
Oct. 26	597,434	592,495	644,078
Oct. 19	561,854	589,883	623,917
Oct. 12	531,104	583,993	636,542
Oct. 5	568,397	582,619	621,031
Sept. 28	593,378	585,673	613,394
Cumulative total, 43 weeks	23,401,661	23,328,289	24,666,249
Estimated revenue ton-miles (billions) 43 weeks	617.3	596.4	615.0

PIGGYBACK CARLOADINGS

U. S. piggyback loadings for the week ended Oct. 19 totaled 27,763 cars, carying 45,748 trailers, compared with 25,889 cars, carrying 42,730 trailers, in the coresponding 1967 week. Loadings for 1968 up to Oct. 19 totaled 1,081,054 cars, carrying 1,760,491 trailers, compared with 968,001 cars, carrying 1,592,217 trailers, in the corresponding period of 1968.

IN CANADA

Carloadings for the seven-day period ended Oct. 7 totaled 78,014 cars, compared with 94,743 for the previous nine-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Oct. 7, 1968	78,014	23,705
Oct. 7, 1967	75,695	23,755
Cumulative Totals		
Oct. 7, 1968	2,867,171	943,982
Oct. 7, 1967	2,944,964	955,962

FREIGHT TRAIN CARS

• *Trailer Train.*—Ordered 67 60-ft flat cars from Pullman-Standard and 26 89-ft, 4-in. standard-level flats from Bethlehem, bringing to 5,145 the number of new cars purchased since Jan. 1. On Oct. 21, TTX had 48,217 cars in service or on order.

• *Car orders and deliveries.*—Orders were placed in September for 4,423 new freight cars, compared with 3,156 in the previous month and 4,608 in September 1967. Backlog of new cars on order and undelivered was 16,224 on Oct. 1, compared with 16,256 on Sept. 1 and 24,762 on Oct. 1, 1967.

FREIGHT TRAIN CARS DELIVERED AND ORDERED IN SEPTEMBER AND BACKLOG ORDERS ON OCTOBER 1, 1968

Delivered

	September 1968	August 1968	September 1967
Built New by Car Builders	3,062	2,488	4,344
Built New in R.R. Shops	1,386	1,272	1,918
Built New—Total	4,448	3,760	6,262
Rebuilt	920	964	1,583
TOTAL DELIVERED	5,368	4,724	7,845

Ordered

To be built New by Car Builders	4,323	3,033	3,948
To be built New in R.R. Shops	100	123	660
To be built New—Total	4,423	3,156	4,608
To be rebuilt	0	600	300
TOTAL ORDERED	4,423	3,756	4,908

On order and undelivered

	October 1 1968	Septpember 1 1968	October 1 1967
To be built New by Car Builders	12,688	11,434	16,249
To be built New in R.R. Shops	3,536	4,822	8,513
To be built New—Total	16,224	16,256	24,762
To be rebuilt	5,320	6,240	9,996
TOTAL ON ORDER	21,544	22,496	34,758

LOCOMOTIVES

• *Penn Central.*—Ordered 130 new high-speed, heavy-duty diesel-electrics at a cost of more than $31 million (RA, Sept. 30, p. 11). EMD will supply 90 3,000-hp units, and General Electric will supply 40 3,300-hp units. The new order brings PC's commitments for new equipment, since merger, to more than $110 million. Previously announced were orders for 100 locomotives and 3,715 freight cars.

NEW FACILITIES

• *Penn Central.*—Ordered two SEARCH locomotive test systems and 489 locomotive test harnesses from Dalmo Victor for delivery this year. Previous orders for SEARCH were placed by Sante Fe, Canadian National, C&O/B&O and Southern Pacific.

• *Southern.*—Placed a $1.9-million order with Motorola for solid-state mobile and portable two-way radios. Motorola's Communications Division will deliver 802 MOTRAN mobile radios and 1,120 PT-200 portable units.

YOU OUGHT TO KNOW

Loss and damage: not all good, not all bad

Latest available figures on freight loss and damage payout for 1968 won't cause anybody to let up on L&D prevention activities—but, on the other hand, they aren't as bad as they might be. Through six months, payout totaled $93.6 million, up 5.4% from the $88.9 million recorded last year. But, for the 12 months ended June 30, payout was up by only 3.8%. And, on a first-six-months basis, the ratio of payout to revenue dropped.

CTA: In the courts and on the job

Chicago Transit Authority came up as a newsmaker twice last week—once in connection with the August wildcat strike of bus drivers, once as a partner with a Chicago commuter railroad in a joint city-federal-CTA-Chicago & North Western venture called Northwest Passage. In the court case, a judge turned down a complaint by dissident CTA bus drivers which asked for an order requiring the holding of an election to determine a proper bargaining representative. Bus drivers already have a local of the Amalgamated Transit Workers—but the dissidents, most of them Negroes, charge that present leadership, mostly white, is not representative. Meanwhile, CTA and C&NW were looking ahead to a January start of construction on Northwest Passage, which will be a link between CTA's rapid transit lines and Northwestern's commuter operations. One part of the experiment that may bear close watching: the job-opportunity factor, involving provision of better transportation between Chicago's South and West sides and the city's West, Northwest and North suburbs.

Soo Line hails an "exciting expansion"

With merger of Chicago & North Western and Chicago Great Western, Soo Line got access to a growing industrial district south of St. Paul—and to Soo, this shapes up as no small plum. Soo is calling its new operation an "exciting expansion of service territory." The road has put up a new station for the Roseport industrial area; it's promising service at least twice daily, more frequently as volume requires, with the added note that "initially, train schedules will be flexible."

Union Tank plans more diversification

Diversification-bound Union Tank Car Co. is at it again, having agreed to acquire Mec-O-Matic, Inc., manufacturer of materials handling equipment, for more than $1.1 million in Union Tank common stock. The transaction is subject to approval by Union Tank directors and M-O-M stockholders. Earlier this year, Union Tank announced plans to acquire the Credit Bureau of Cook County, Inc., and to purchase two tracts of southern California land at a cost of $16 million (RA, Sept. 23, p.65).

Transport men work as advisers for Nixon Group

The Nixon campaign is being aided by 11 prominent transportation men who form an advisory panel for the Transportation Volunteers for Nixon-Agnew, a committee of United Citizens for Nixon-Agnew. The panel includes: Daniel P. Loomis, Association of American Railroads past president; James M. Symes, Pennsylvania Railroad past president, chairman and chief executive; Harold Cunningham, Goodyear Tire traffic director; E. F. Hamm, Jr., Traffic Service Corp. president; J. W. Hershey, American Commercial Lines president; Clarence A. Kelley, Dixie Ohio Express president; Clarence D. Smith, American Home Products Co. traffic director; Thomas M. Thawley. National Transit Co. president; Robert F. Thompson, Vermont Transit Co. president; Charles E. Walker, Union Barge Line Corp. president; and C. G. Zwingle, Pacific Intermountain Express Co. president.

(*Continued on page 28*)

James P. Gardiner has been promoted to district manager, railroad product sales, **ACF Industries,** Washington, D.C. Mr. Gardiner formerly was district sales representative, Camden, N.J.

T. Jack Warrick has been named manager—metropolitan transportation equipment engineering, Transportation Systems Division, **General Electric Co.,** Erie, Pa. Mr. Warrick joined GE in 1943. He has received four patent awards involving gas turbine locomotive electric propulsion and power plant control, and a voltage—current measuring relay.

Robert A. Martin, sales representative, **Okonite Co.,** Chicago district, has been appointed regional marketing specialist, central region. He will concentrate on the wire and cable requirements of the railroad industry. Before joining Okonite, Mr. Martin was a customer service representative, **Burlington.**

Rudolph C. Karich, sales trainee, **Timken Roller Bearing Co.,** appointed sales engineer, Railroad Division, Philadelphia, Pa.

Robert A. Pratt has been named product development engineer, Shipping Systems Division, **PORTEC, Inc.,** Chicago. He was previously container group leader, Brown Trailer Division, Clark Equipment Co.

James R. Legge has been elected vice president—international operations, **Cardwell Westinghouse Co.,** Chicago.

Donald F. McConnell has been appointed manager—Central District, **Westinghouse Air Brake Division, WABCO,** Pittsburgh, Pa. He had been senior specialist—railroad products marketing. Mr. McConnell succeeds **Robert A. Mitchell,** appointed manager—Western District, Chicago (RA, Sept. 23, p. 80).

OBITUARY

James W. Coleman, 78, founder and president, **Consolidated Equipment Co.,** Montreal, Que., Can., died Oct. 2 at his home in that city.

George T. Scott, 85, retired vice president and comptroller, **Chicago Great Western,** died Oct. 17 at his home in Evanston, Ill.

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AS THE EDITOR SEES IT

NON-NEWS FROM CALIFORNIA—A hoary old rule of journalism states that it is not news when a dog bites a man, although a reverse assault would be worthy of a squib. On this basis, it is certainly not news to report that the State of California has again refused a train-off petition of the Southern Pacific. But there is a chilling footnote to this story that makes it worthy of comment.

'KEEP THOSE TRAINS'—The word from California is simply that the State PUC has ordered the SP to continue its "San Joaquin Daylight" passenger train service between Los Angeles and Northern California. The PUC maintains that the railroad lost "only" $593,000 on the service in 1967 (not $1.4 million as claimed) and says that, in any case, "railroad management has the absolute obligation to carry people as well as property" due to the gift of "valuable franchises" from the government. So much for the non-news.

WHAT CALIFORNIA WANTS—Now on to that footnote: PUC Commissioner William Bennett, in a concurring opinion, wanted to know if Californians weren't entitled to some of the same amenities of railroad service that foreigners are accustomed to. Said Bennett: "Europeans enjoy passenger-train service which is a marvel of efficiency. The Japanese have exceeded this nation in providing outstanding rail service."

BUT WILL CALIFORNIA PAY?— This is all too familiar an argument—carrying, as it does, the implicit suggestion that railroad customers might be better off if our own railroads, like those in foreign lands, were run by the government. Now, California has 7,447 miles of railroad—or a system about half the size of British Railways. Britain has some great, fast passenger trains. Britain lost $500,000,000 on her railways last year. British Railways paid no taxes. SP paid over $23,000,000 in taxes to the State of California last year. Do British trains still sound so attractive to Commissioner Bennett? Japan? The government put up $1.2 billion for the New Tokaido Line. Is California ready to put up this kind of money? (Even with NTL's profit—in a country whose automobile population is about 1/50th, per capita, that of California—Japanese National Railways still lost $261,000,000 last year. And paid no taxes.)

NATIONALIZATION THE ANSWER?—It's time somebody got across to Commissioner Bennett—and all the others who talk as he does—that what they're really talking about is nationalizing the railways. But they ought to look at the price tag before they buy.

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VIEWPOINT

Transit on the ballot: The moment of truth at the polls

Millions of Americans will cast their ballots Nov. 5 to elect a new president and a large part of the Congress. In Atlanta, Los Angeles, the Washington suburbs and the State of New Jersey, the voters will also be passing on whether bond issues should be authorized for multi-million-dollar transit plans.

It's a magic moment. By then all the lobbying and electioneering are over, all the pros and cons debated. It's the turn of the ordinary man to decide what the future course will be, and his decision is absolute. Transit industry officials will of course think that the reasons for supporting these bond issues are obvious. However, the moment of truth comes when the general public shows whether those reasons are in fact obvious or not.

It would be wonderful to be able to say with assurance that the bond issue referenda are a shoo-in in all four places. Wonderful, but more than a little optimistic. True, public information campaigns were mounted to let the man in the street know what is at stake. But some of the confident talk from transit supporters sounds suspiciously like whistling in the dark.

A mayor, a majority of the city council, a state transportation official, the local Jaycees or the League of Women Voters chapter, all of them may be fired up by the transit cause. But what about the man in work clothes carrying a lunch pail to the bus stop? What about the car pool of engineers who drive in from the same suburb every day? What about the secretary who used to spend her lunch hour shopping downtown, but has since moved to the suburbs and can do the same thing at a shopping center five miles out of town? Do they really know by this time why more transit is good for *them?*

That, after all, is the acid test of the effectiveness of the public information programs conducted by transit authorities, industry trade associations, and ad hoc committees of transit supporters. When the balloting is done, we really will know whether transit people have only been talking to one another—a common charge—or not.

Transit is for the other guy

There is a limit to public spiritedness. People see things in terms of what touches them immediately. A motorist gets caught on a traffic-choked freeway, and his first reaction is, "Why can't they add four more lanes?"

A homeowner sees his taxes spiralling upward, and says, "We've got to draw the line on taxes somewhere—this is where it will have to be."

A man in the street says, "Transit? Look, you can keep New York and all the subways, we don't need it. That's what I moved out here to get away from."

Transit people know these arguments can be met with counter-arguments. They've managed to get the ear of many public figures influential in their local communities, and make them understand why better transit is a crying need. Now we will see if John Q. Public does, too.

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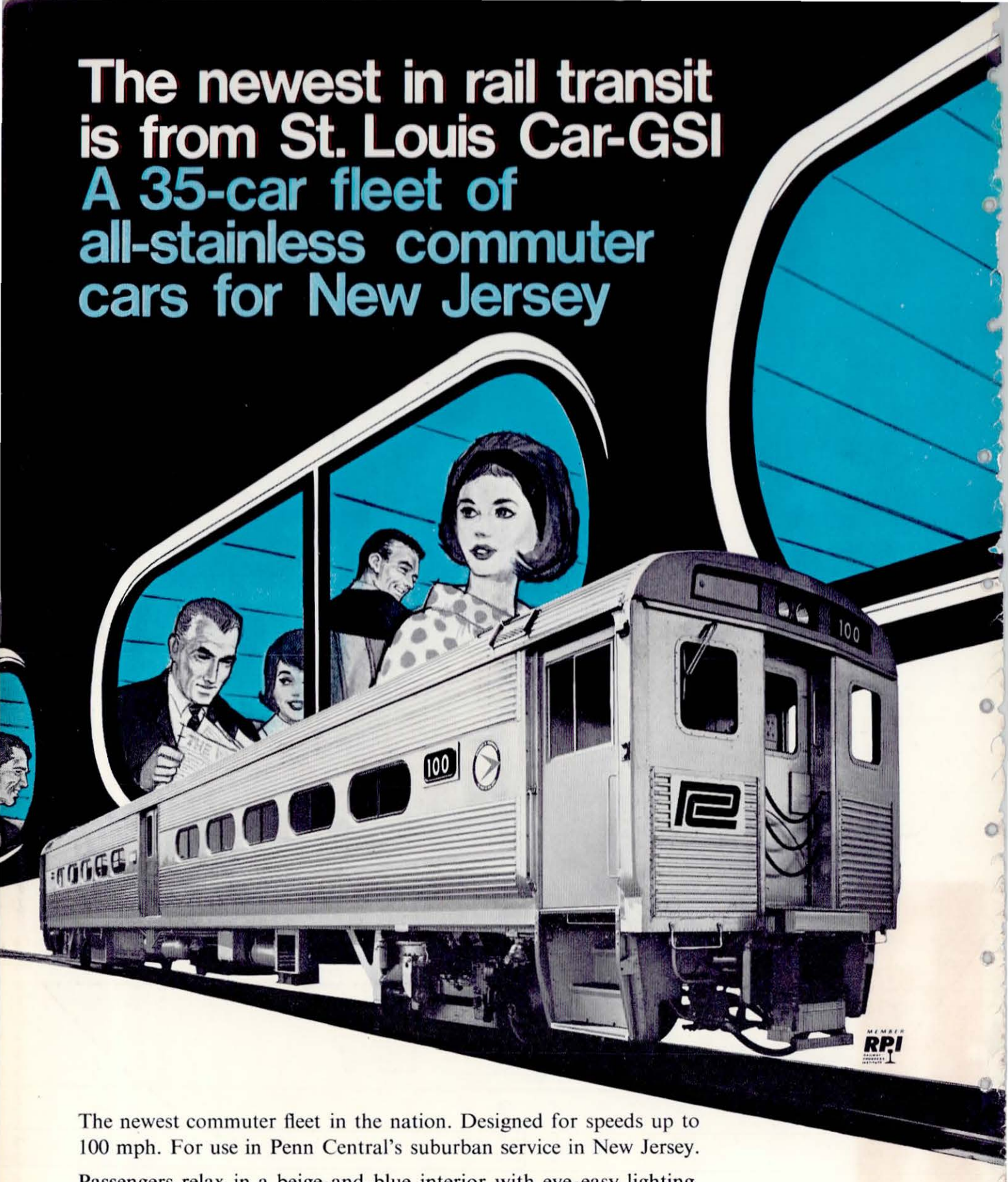

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